

The Role of Attachment Styles in Team Functioning

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Abstract

This research explored the potential influences on team functioning, from the perspective of adult attachment theory. Attachment styles are seen to reflect internal working models of self, others, and relationships, and influence individuals' motivations, abilities, and perceptions as regards relationships. The research question explored what the role and influence of an individual's global and team attachment style may have upon an individual's experience of a work team. It sought to explain engagement with an individual's work team, what is the subsequent influence of this on performance and how attachment style contributes to this. The key issues of Team Member Exchange and Team Identification were explored as areas of team functioning. These are the variables used to study and understand an individual's team experiences, their engagement with the team, and the relationship with their performance ratings. The research found that both adult global and team attachment styles were negatively associated with Team Member Exchange (TMX), Team Identification, job satisfaction, performance ratings and Organisational Citizenship Behaviours (OCB). Using mediation analysis, team avoidant attachment was consistently and strongly associated with the study's dependent variables and emerged as the key explanatory variable in this research. When all the attachment styles were analysed simultaneously to determine the unique effects of each attachment style, team avoidance style was the most useful in understanding both TMX and Team Identification, job satisfaction, OCB and performance measures. Those with avoidant team attachment styles felt that the experience of team was negative with lower TMX and Team Identification reported. The research has added new insights to the team and attachment literature with the important contribution of team avoidance attachment to TMX and Team Identification.

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1. Introduction to the Research

This research seeks to explore the potential influences on teams, and specifically perceptions of team functioning, from the perspective of adult attachment theory and the association with performance related outcomes. Attachment styles are seen to reflect internal working models of self, others, and relationships (e.g., Bartholomew & Horowitz, 1991) and influence individuals' motivations, abilities, and perceptions as regards relationships (Harms, 2011; Mikulincer & Shaver, 2007a) and there is now an increasing focus on the role that adult attachment styles have in workplace situations and relationships (Harms, 2011; Littman-Ovadia, Oren, & Lavy, 2013; Mikulincer & Shaver, 2016). These individual differences in relationship orientations are relevant for exploring and researching individuals' work attitudes and emotions (Richards & Schat, 2011). This current research distinguishes between the internal working models that an individual has about others, called here individual or global attachment, and those representations that they may have towards teams, which here are termed team attachment styles and this attachment perspective allows an exploration of how team members view themselves and their team.

It is acknowledged that each theoretical perspective has certain strengths and weaknesses and there will be issues with which the adult attachment theory view does not deal (e.g. Morgan, 1986). Issues such as conflict, power, politics and organisational culture play a crucial role in organisational relationships and processes (e.g., Pheiffer, Griffiths, & Andrew, 2006). However, the focus of this research is to understand how an individual's perception may potentially influence work teams and to build upon work within the attachment framework research literature. The approach is therefore within an individual differences paradigm and seeks to develop the insights from this view. Within this paradigm this current research will focus on relationships that individuals have with their teams.

The notion of exploring an organisation from multiple perspectives is recognised; however, this current research argues that attachment theory perspective provides a unique and deeper understanding of organisation interactions and workplace teams. It will be held that teams are a crucial aspect of modern organisations, and that organisations may be seen as a set of relationships and that this relational view may bring advantages to organisations (Blustein, 2011). The attachment relational view is different to social construction relational views such as those of Gergen (2009; 2011). This differs from the social constructionist view in that this research will focus on the nature of interpersonal relationships instead.

The literature and research in the area of teams highlights that work is still needed to understand the effective functioning of teams (Bell & Kozlowski, 2012), and that the use of the adult attachment concepts brings a useful concept into such research (Mikulincer & Shaver, 2007a). This thesis integrates adult attachment theory with the concepts of Team Member Exchange (TMX) and Team Identification, which have previously been shown to be important predictors of team functioning. This research will explore these two team factors as indicators of team functioning, and then evaluate the influence of these variables on indicators of individual, team and organisational performance. The research therefore seeks to explore the nature of the relationships between these variables - with the attachment style as a key predictor of these relationships. In this research, Team Identification is seen as the degree to which individuals describe themselves in terms of their particular team membership, and team attachment style reflects the tendency to seek and feel secure in the team, whilst TMX is the quality of relationships between individuals and their team members. This current research will suggest that team and individual (or global) attachment styles will influence both the tendency to identify with a team and the relationship between identification and the individual team experiences.

1.1. Rationale for the Research

Two key areas are reviewed below as the basis for the research: teams and attachment, and the specific key team variables proposed. The importance and role of teams in the workplace is considered. Attachment theory is suggested as a useful theoretical framework from which to study team functioning issues.

There has been an ongoing shift from work organised around individual jobs to team-based work structures (Kozlowski and Bell, 2003). It is clear that the hierarchical structures which characterised corporations and organisations have gradually been replaced as organisations have transformed into flexible and flat organisations (Sennett, 2000). This increasing complexity in the workplace has led to both greater interdependence and specialisation of job roles. As a result, the use of teams and team-based organisations has become increasingly common (Devine, Clayton, Philips, Dunford, & Melner, 1999). A study by the Centre for Creative Leadership found that 91% of the participants agreed that teams are fundamental to organisational success (Martin & Bal, 2006). Teams are seen as key to organisations and crucial as organisations become more networked, more flexible, and more dynamic. However, whilst how teams work together has attracted a considerable amount of attention, there is still much work required in the area. Furthermore, there are various theories around the process of team functioning and how this is often more important than the individual skills and abilities within the team (Belbin, 2012; Lawler, Mohrman, & Ledford, 1995). Not only in the academic press do teams attract attention, the popular management press has the same interest and concern with the role and importance of teams (Katzenbach, 1993).

Nonetheless, this remains a contested area with some key issues still to be addressed and further empirical research into the factors that can influence teams is required (West, Brodbeck, & Richter, 2004). This thesis proposes to add a novel view on team functioning

by studying the possible interpersonal factors that may impact on it. It builds on work in the area of teams by adding insights into team functioning from the perspective of attachment theory, which has as its focus an interpersonal view of organisations. This use of attachment theory complements research in the area of teams. For example, research is being undertaken into the nature of the ties that the individuals within teams have with each other and also the ties that they have with other teams. As a case in point, a meta-analysis by Balkundi and Harrison (2006) looked at how members' and leaders' social network structures either help or hinder team effectiveness and the findings suggest that teams with densely configured interpersonal ties attain their goals better and that they are more committed to staying together, so that team task performance and viability are both higher (Becker, Ullrich & Van Dick, 2013; Mikulincer & Shaver, 2016). In conclusion, there is an established need for both academic and applied work into the nature of teams from an interpersonal perspective (De Jong, Curseu, & Leenders, 2014).

This thesis therefore seeks to address the requirement for work around teams and develops a new model that brings together various current areas of contested research and practice. This model explores the influence of interpersonal factors upon influence teams and the functioning of teams in the workplace with the key focus to determine the role of attachment styles in the effective functioning of teams. In this, the concept of TMX and Team Identification are used and they are examined in a model to explore the interaction between them and to determine the relationship with performance variables. The research question is therefore: What is the role and influence of an individual's dyadic (or global attachment style) and their specific team attachment style on the individual's experience of their work team, and the subsequent influence on performance related outcomes?

However, there is some discussion as to how we measure performance (e.g. Neustadt, Chamorro-Premuzic, & Furnham, 2011). There are direct measures of performance and what

are called proxy measure or context measures which may give more insight into performance (e.g., Barrick & Mount, 1991; Barrick, Mount, & Judge, 2001) and an example of a proxy measure is Organisational Citizenship Behaviour (OCB) which is seen as contextual job performance (e.g., Borman & Motowidlo, 1993; Gonzalez-Mulé, Mount, & Oh, 2014), and as an important indicator of actual performance (Judge, Thoresen, Bono, & Patton, 2001; Organ, 1988). The concept of OCB is a term that incorporates anything positive and constructive that employees do, of their own volition, which supports co-workers and benefits the company (Organ, 1988; 1997). The links between job satisfaction and performance in organisations has a long history of research and is seen as a key dependent variable in organisational research and as a useful proxy for performance (Judge, Thoresen, Bono, & Patton, 2001), and these measures are defined in Table 1.1 and utilised in this current research.

1.2. Attachment

The underlying theory in this proposed research is the notion of adult attachment which holds that early close relationships experienced by children shape the psychological model for the relationships that they will ultimately form as an adult (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1982). The key attachment orientations are categorised as *secure* where an individual anticipates that their needs will be met, *anxious* where it is uncertain if their needs will be met, and an *avoidant* style where the individual is withdrawing so that the dependence on others for meeting needs is reduced (e.g., Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987). Attachment theory is a theory of affect regulation as it occurs in the context of close relationships. Initial work focused on regulation of emotions through maintenance of proximity to attachment figures (supportive others) when they were needed, however, there has been work in the regulation of emotion,

and the benefits of such regulation for exploration and learning (Mikulincer & Shaver, 2007a). The work in adult contexts tends to share the key theoretical idea that an individual's attachment style - which is a systematic pattern of relational expectations, emotions, and behaviours, which have arisen due to a person's attachment experience - has an influence on adult interactions with others (e.g., Bretherton, 1992; Fraley & Shaver, 2000; Mikulincer & Shaver, 2005a). This current research seeks to investigate the pathways or the direct and indirect influences of attachment styles on team functioning in order to explore the quality of the relationship and social exchanges with the team and explores the antecedents of key team issues and the direct and indirect effect of attachment on team issues and the impact on performance.

A significant amount of research has shown that attachment theory predicts a wide range of relational and emotional outcomes (Mikulincer & Shaver, 2007a; 2016), as well as work-related and organisational outcomes (Hazan & Shaver, 1987; Lee & Ling, 2007; Mikulincer & Shaver, 2016). Within the work domain, attachment theory has been extended to non-close relationships (Thompson & Lee, 2011; Mikulincer & Shaver, 2007a; Richards & Schat, 2011) and these studies have shown the potential role for using attachment models in organisations and for integrating attachment theory into standard organisational behaviour models (Harms, 2011). However, it is pointed out that research still needs to be done in order to integrate attachment theory into current models such as leadership, performance, teams and job satisfaction (Richards & Schat, 2011). This current research adds new insights by its focus on the team and attachment and while factors such as leadership, culture, conflict, gender are some issues that also warrant further research, this particular research has focused on internal team exchanges as it has been a relatively under-researched area to date. The aim is to apply attachment theory as a relevant framework for understanding individual differences in team relationships and to focus on possible paths or mediation variables that

cover a broad range of team interactions and dynamics as called for in the attachment literature (Paetzold, 2015).

While attachment theory has been applied to social groups, there are significant differences between groups and teams (e.g., Korsgaard, Brodt, & Sapienza, 2003) and as clearly there are important differences between groups and teams they need to be considered separately. For instance, a team works together and shares a common goal, whilst those who form a group are more independent of each other, and a group does not automatically constitute a team as a team requires coordinated effort (Katzenbach and Smith, 1993). A team is more specialised in that it includes common resources and collective effort. Teams are “a distinguishable set of two or more people who interact, dynamically, interdependently, and adaptively towards a common and valued goal/objective/mission, who have been assigned specific roles or functions to perform, and who have a limited lifespan of membership” (Salas, Dickinson, Converse, & Tannenbaum, 1992, p. 4). For those in teams, working in a team has features that distinguish it from working alone. Team members need to coordinate and synchronise their actions, and every member has a critical role for their collective action. Consequently, the success of teams is dependent on the way team members interact with each other to accomplish the work (Marks, Mathieu, & Zaccaro, 2001). This interdependence means that there is a role for understanding how individuals attach themselves to teams - leading writers still argue that such work is required (Korsgaard et al., 2003).

1.3. Teams

Teams are now generally considered to be the building blocks of modern organisations, and yet, to date, there is still a need for more research to answer contested issues and gaps in the literature (Costa, Passos, & Bakker, 2014; Mathieu, Tannenbaum,

Donsbach, & Alliger, 2013). For example, there is development required around the issues of coherence, integration and understanding of how team composition effects relate to important team outcomes (Mathieu, et al., 2013). Increasingly, affect is recognised as a factor that shapes group processes and outcomes, and work is still needed in this area (Barsade and Knight, 2015). There is also the emerging notion of team engagement (Costa, Passos, Bakker, 2014) which includes emotions and behaviour, and attachment theory can provide a useful insight into these issues with the notion that different attachment styles may result in a team composition that may reflect differing engagements within the team and different experiences of the team and its dynamics (e.g. Mikulincer & Shaver, 2016).

It is significant that the area of teams is a contested field with numerous definitions and approaches and some differences, however, for this research it is accepted that most definitions share an acknowledgement of the interdependence and social nature of teams and the need to work together rather than as an individual. This interaction is seen as key for a team to be successful. The various definitions highlight interpersonal issues for teams. As an example, Kozlowski and Bell (2003, p 334) define teams as:-

“collectives who exist to perform organizationally relevant tasks, share one or more common goals, interact socially, exhibit task interdependencies, maintain and manage boundaries, and are embedded in an organizational context that sets boundaries, constrains the team, and influences exchanges with other units in the broader entity”.

Another definition is that of Salas et al. (1992, p. 4) who note that teams are: -

“a distinguishable set of two or more people who interact, dynamically, interdependently, and adaptively towards a common and valued goal/objective/mission, who have been assigned specific roles or functions to perform, and who have a limited lifespan of membership”.

In these definitions it is clear that team members need to coordinate and synchronise their actions. Each person has an important role for their team's work and outputs. It is therefore argued by many that the success of teams is reliant on the way team members cooperate with each other to realise the work (Marks et al., 2001). Despite the volume of definitions and the differences present, there are some common themes. For example, Costa et al. (2014) notes that when these various definitions of teams are integrated, four major categories emerge: individual characteristics, team characteristics, task characteristics, and work structure. Attachment theory may play a role here as it provides potentially useful insights into how and why individuals may interact differently in a team and also provide a deeper understanding of team composition. Different attachment style in the composition of the team, may result in different team dynamics. It therefore follows that attachment theory may add to the existing teamwork literature and practice. For instance, a key model for understanding teams that has shaped research into teams is the inputs–processes–outputs (IPO) model of team effectiveness (e.g. Gladstein, 1984; McGrath, 1964; 1984). This model has seen differing variations; however, there is a core model in that specific “input factors”, that is, individual level factors (e.g., team-member attributes), group factors (e.g., structure and size) and environmental factors (e.g., task characteristics and reward structures) - lead to an “output” in form of group effectiveness or performance. Attachment may play a role as an input and also as a process. A critique of this input role is that it may focus the direction of study to the internal working model or attachment style rather than the actual attachment relationships. In the IPO model, the influence of the input factor on the output factor is mediated via group interaction “processes”. This traditional model has been extended by the focus on mediational processes. The notion of the input-mediator-outcome (IMO) model to distinguish this approach from the customary IPO framework was devised by Ilgen, Hollenback, Johnson and Jundt (2005). In this approach, there is a shift away from the

relationship between team characteristics and team outcomes, to discover intermediary mechanisms that more fully explain the process of how team inputs lead to team effectiveness. This sees the use of techniques such as mediational analysis and structural equation modelling (SEM; MacKinnon, 2008) being used in psychology, yet it is not without controversy. One key issue suggested is that in mediation models the analysis should be shifted towards evaluating the magnitude and significance of indirect effects (e.g., Rucker, Preacher, Tormala, & Petty, 2011). Work is needed into the interaction of the key team variables, to explore the antecedents and outcomes of relevant variables. Given the relational nature of attachment, this current research has focused on the internal team exchanges or the team relationship and how they are affected by the attachment style. Therefore, in this way, this research builds and adds to the team focus.

Other factors, such leadership and culture may influence the team, however, the concern in this research is the focus on the team as a whole and also the individual perception of their team. To achieve this, two key concepts which have been shown to be important indicators of team functioning and performance, namely TMX and Team Identification, are used as the focus. These two variables are seen in the current research as mediators in the interaction between attachment styles, team functioning and performance. There are other key variables related to this area such as such as team cohesiveness, conflict and organisational culture. However, the need for studies to understand the quality of social exchange dynamics for understanding teams and team effectiveness is established (Srivastava & Singh, 2015). Variables such as cohesion, conflict and culture in teams have been well studied (e.g. Barrick, Stewart, Neubert & Mount, 1998; Gau, James & Kim, 2009; Han & Harms, 2010) and with attachment (e.g. Bajramovic, 2015). Furthermore, the research question in this current research investigates the social relationships or social exchanges in teams and considers how individuals perceive their teams within this

framework. This builds and adds original insights and two key areas of study for team functioning, TMX and Team Identification, are suggested as intervening variables. These two variables may represent relevant motivational and cognitive processes through which attachment styles influence performance. The antecedents of TMX and Team Identification also need research and attachment theory is well placed to bring some insights into these areas. Therefore, issues such as leadership, culture and conflict are not the focus of this research, rather issues of functioning team exchanges. The concept of TMX includes the effectiveness of the team meetings, the two-way reciprocity between the individual team member and the team, and the cohesiveness of the team. High levels of TMX are seen as indicating lower conflict in the team. Team Identification is about how the individual identifies with others in the team (Smith, Murphy & Coats, 1999). Both these variables have been seen to be important in team functioning. Research in relation to the antecedents for these variables is lacking. Furthermore, both constructs are consistently linked to performance (Avey, Luthans, & Youssef, 2010; Banks et al., 2014; Crisp et al., 2009).

1.4. Team Member Exchange

A critical element of team effectiveness are the exchanges between team members, called Team Member Exchange (TMX), which Seers (1989, p. 119) defines as an “individual member’s perception of his or her exchange relationship with the peer group as a whole”. These exchanges are essential because they make up the process of communication between team members. Because TMX is such an essential part of teams, it is a useful conceptualisation of team functioning. TMX examines the relationships among team members, has a strong theory base and is empirically proven to link relationships with workplace outcomes such as job performance, organisational commitment, job satisfaction, and turnover intentions (e.g., Banks et al., 2014). TMX is based on social exchange theory

and is similar to Leader–Member Exchange (LMX) with both measuring the quality of reciprocal exchange among employees in the workplace. LMX focuses on supervisor–subordinate relationships, and TMX examines the relationships among team members. Attachment theory potentially offers a deeper insight into the dynamics of how and why individuals may experience their social exchange with their team members. The current research explores the role of TMX with performance and other organisational outcomes.

Positive TMX has been found to be associated with greater co-ordination of group tasks, enhance members’ willingness to assist one another, and share ideas and feedback. This in turn improves employee performance (Liden, Wayne, & Sparrow, 2000; Seers, 1989), generates higher levels of engagement (Dollard & Bakker, 2010; Liao, Yang, Wang, Drown, & Shi, 2013), job satisfaction (Major, Kozlowski, Chao, & Gardner, 1995; Seers, 1989; Seers, Petty, & Cashman, 1995) and citizenship behaviour (Avey et al., 2010; Anand, Vidhyarthi, Liden, & Rousseau, 2010; Love & Forret, 2008). TMX relationships have been linked to a variety of employee and organisational outcomes. However, there is limited research on the antecedents of TMX and specifically no research on the role of individual level factors such as personal dispositions (Srivastava & Singh, 2015). This current research therefore addresses a gap in the TMX and attachment literature.

1.5. Team Identification

Social identity analysis (e.g., Haslam, 2004) argues that people are attracted to teams and organisations with positive features rather than by individual difference variables such as personality. Issues such as the competence and achievements of the organisation, or its moral values and ethical conduct (Prooijen & Ellemers, 2014) have been shown to make teams and organisations more attractive to individuals. However, the role of individual differences is downplayed and the influence of attachment has been shown to have a role and more research

is required. The attachment that a person may have to a team may therefore influence the nature and degree of Team Identification (Smith, Murphy, & Coats, 1999). However, again, research is lacking in this area (Crisp et al., 2009) and now specifically applied to workplace teams in this current research.

Team Identification is important for organisations as it is also now generally accepted that employees can and do identify strongly, if not more strongly, with work groups and teams than organisations (Van Dick, 2004; Knippenberg & Schie, 2000). Understanding this from an alternative perspective may complement the existing social identity research. Research into identification has shown how in organisational contexts, managerial benefits derive from a clearer understanding of both when and how particular foci of identification come to drive performance (Ashforth & Johnson, 2001). Organisational identification is more strongly linked with performance on behalf of the organisation as a whole, while Team Identification is more strongly associated with pro-team activities such as inter-member co-operation, citizenship and other altruistic behaviours (e.g., Van Dick, 2004; Knippenberg & Schie, 2000). Attachment theory potentially offers a deeper insight into the dynamics of how and why individuals identify with teams. Whereas identification has clearly been shown to be linked to positive organisational outcomes, relatively little is known about the role of attachment styles in explaining a person's propensity to identify with teams.

1.6. Summary

This current research explores the role of adult attachment styles and determines the direct and indirect effects that adult attachment may have on performance variables, specifically self-ratings of self and team performance, job satisfaction and OCB. The research will seek to analyse the direct effects of attachment styles on these variables and then determine the pathways whereby adult attachment influences these variables via team

member exchange and Team Identification. This approach therefore allows the influence on team functioning to be explored with the relationship between attachment and team factors considered in a mediation model as proposed in Figures 1.1 and 1.2 below. This mediational model is proposed in order to develop research into the attachment and team theory. It explores the attachment influences on the team variables and their relationship with the outcome variables. As discussed above, mediation analysis offers a more complex and realistic understanding of the issues that affect team functioning. In this mediation process, the independent variables are the attachment styles, with TMX and Team Identification the mediating variables. A mediation analysis allows for an exploration of how the effect of an independent variable is transmitted onto a dependent variable. Much of the research in the field tends to focus on the relations between two variables, X and Y, and much has been written about two-variable relations. However, the current research seeks to study these issues and achieve more complex understanding of the antecedents of team functioning and performance through the direct interactions and indirect effects, (i.e., mediation), rather than only correlational studies which tend to dominate. The first stage of this proposed research is to consider a single independent variable and a single mediator as shown in Figure 1.1 below followed by an examination of both global and team attachments. The proposed research is a mediational model with the aim of exploring the pathways between attachment, team variables and organisational outcomes, and a definition of these is provided Table 1.1.

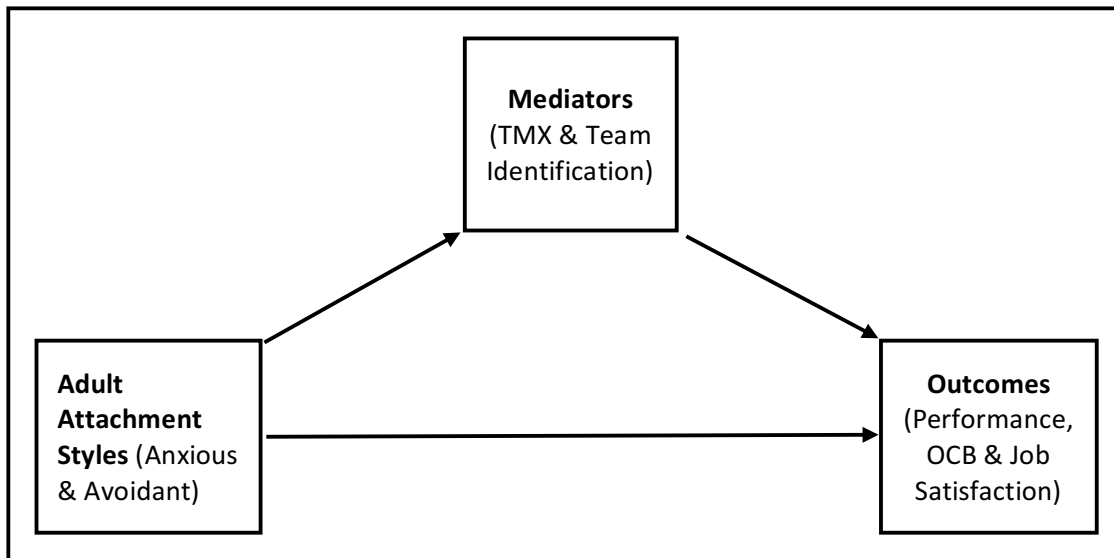


Figure 1.1 Simple Mediation Model. This figure simply illustrates the proposed direct and indirect effects of attachment styles on workplace outcomes.

The second phase of the research is a mediational model proposed by Preacher and Hayes (2008), which considers multiple Independent Variables and in this case, two proposed mediators and this is presented in Figure 1.2 below. This testing of the variables simultaneously allows for the exploration of the total and indirect effects.

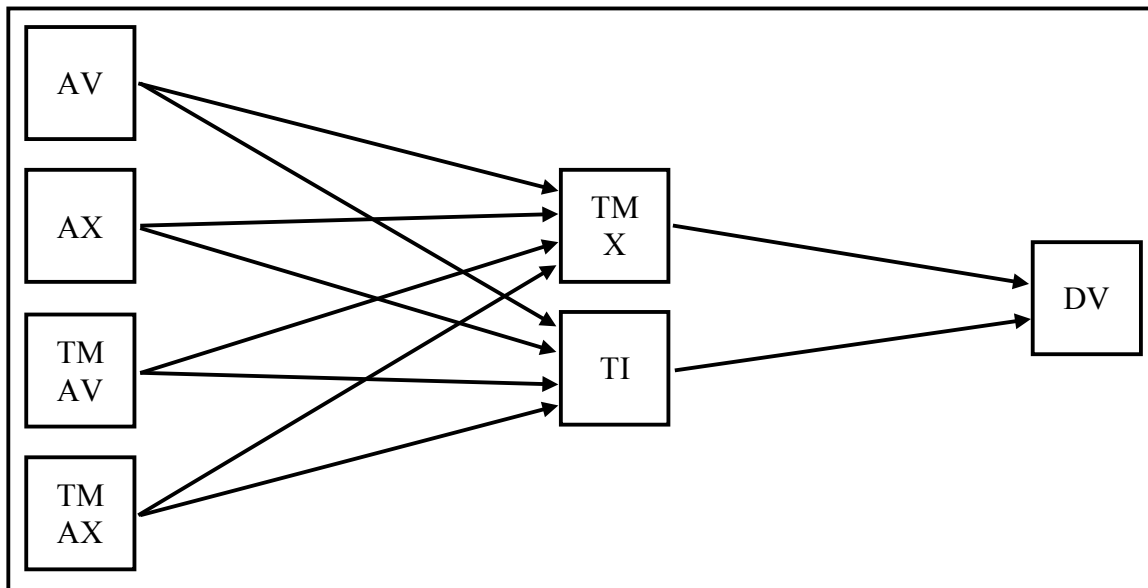


Figure 1.2 Detailed Mediation Model. This figure illustrates how specific variables are predicted to fit into the mediated model.

AV, avoidance attachment style; AX, anxiety attachment style; TM AX, team anxiety attachment style; TM AV, team avoidance attachment style; TMX, team member exchange, TI, Team Identification, DV, dependent variable (e.g., performance).

1.7. Research Structure

Chapter 2: The chapter outlines the key tenants of attachment theory and critically reviews the notion of attachment and its use in an organisational setting. Attachment theory is linked to teams and key variables in the research, TMX, Team Identification, performance, job satisfaction and OCB. From the theory, the study's hypotheses are proposed.

Chapter 3: The method of the research is set out, critically analysed and justified in light of recent methodological developments in the area. The issue of the differing approaches to attachment are considered and the development of the survey instrument provided.

Chapter 4: The results of the statistical analysis are given. The descriptive statistics are given, followed by the mediation process of Baron and Kenny (1986) and then followed by the Preacher and Hayes (2008) process.

Chapter 5: In the discussion chapter the results are analysed in relation to the hypotheses, literature and relevance to teams and organisations. The new and novel contribution of adult attachment to teams and to organisations is presented and issues for both theory and practice explored.

Chapter 6: Conclusions about the role and nature of attachment style are drawn out in relation to teams and social relationships at work. The implications for the changing of internal working models are discussed.

The aim of this current research is to develop the research in adult attachment theory by exploring the role of attachment styles in key team social processes, namely TMX and Team Identification, and therefore both the direct and indirect effect of attachment style on performance related outcomes. The research question is: What is the role and influence of an individual's dyadic (global attachment style) and their specific team attachment style on the individual's experience of their work team; and the subsequent influence on performance related outcomes? The research therefore investigates team social exchange relationships, TMX and Team Identification, as mediating mechanisms through which individual and team attachment styles may influence key organizational outcomes. The research then also adds to the team literature by understanding the antecedents of these team processes. TMX and Team Identification were selected as variables to measure and investigate team functioning, as they provide insight into a wide range of team processes, for example TMX gives insight into the perception of the individual team member about their team interactions and includes issues such as conflict, team effectiveness (Srivastava & Singh, 2015), and Team Identification represents issues such as the emotional engagement with the team, a shared mental model of

the team, and the engagement with the team (Haslam, 2004; Tajfel, 1981), and the definition of these constructs are given in table 1.1 .

Table 1.1 *Definition of key study variables*

Definition of key study variables

Concept	Definition of concept
Attachment Style	A relationship-based trait disposition that reflects an individual's propensity to relate to others (Richards & Hackett, 2012) and differs by the degree of attachment anxiety (negative view of self) and avoidance (negative view of others) (Bartholomew & Horowitz, 1991; Brennan, Clark, & Shaver, 1998).
Team attachment style	Individual's internal working model or mental representation of their attachment to the team, that generally predict expectations about an individual's behaviour in a team, two dimensions of team attachment: team attachment anxiety and team attachment avoidance.
Team Member Exchange (TMX)	"An individual's perception of his or her exchange relationship with the peer group as a whole" (Seers, 1989: p. 119).
Team Identification	Refers to how team members consider team goals as their own and feel "psychologically intertwined with the group's fate" (Mael and Ashforth, 1995, p. 310) and "the personal commitment and emotional involvement with a team" (Sutton, McDonald, Milne, & Cimperman, 1997, p. 15).
Organisational Citizenship Behaviour (OCB)	"individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organisation" (Organ, 1988, p. 4).
Job satisfaction	Locke (1976), ". . . a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1304).
Job performance	Perception of how well individual thinks they have performed in their job.
Team performance	Perception of how well individual thinks the team has performed.

2. Literature Review

2.1 Introduction

This research investigates how individuals' adult attachment styles may influence their role, contribution, experience and engagement with their work team, as well as their ratings of performance at work. Expectations about interpersonal relationships have been shown to be highly influential in terms of behaviour, goals, affect and interpersonal behavioural outcomes in teams (Mikulincer & Shaver, 2016). Attachment styles are, in effect, these expectations. The research question is therefore: What is the role and influence of an individual's dyadic (or global attachment style) and their specific team attachment style on the individual's experience of their work team, and the subsequent influence on performance related outcomes? The focus of this research is on the individual's perceptions as represented by global attachment styles and those towards the team. Building on attachment literature and group and team literature, the argument made is that teams need good quality relationships and engagement with their team and the notion of a team attachment style provides a novel insight into team processes and these relationships.

Given the greater importance and significance attached to teamwork found in contemporary organisations, there is a need for better understanding of the functioning of teams and how an individual engages with their team. Attachment theory provides a different and important understanding of this process so the review of attachment literature is followed by a discussion of the research around teams and how attachment theory may specifically contribute to the area. The issues of team composition, team effectiveness and team mentality are seen in the team literature as key issues in team performance and these are used to frame the current study and provide a context for the research, as they are fundamental issues for team performance (Kozlowski & Bell 2003). Although these team issues are well

researched (Kozlowski & Bell 2003), and it has been suggested they link well to attachment theory and can add useful new and useful insights into team functioning (Rom, 2008). TMX and Team Identification are also explored as important areas of team functioning and team relationships and where attachment has not yet explored their influence within teams. These variables are also selected as they are seen as key variables in the social exchange of teams, and they capture a wide range of team processes (e.g. Banks et al., 2014) and require further investigation which sits well with the approach taken in this research, rather than issues such as team conflict and group cohesion, as these two concepts provide a broader insight into team function and they are more exchange oriented so fit within the research questions focus. TMX and Team Identification are then the variables used to study and understand the individual's team experiences, their engagement with the team, and the relationship with their performance ratings.

The process of attachment and attachment theory research needs to be critically analysed and understood in order to fully understand and develop a theoretical framework for this research, from which the hypotheses are derived. This is given below, followed by an evaluation of the potential relationship of attachment to research issues in the area of teams.

2.2 The Dynamics of Attachment Theory

Attachment theory describes the underlying forces of long-term human relationships and refers to the tendency to maintain proximity or closeness to specific, emotionally important others from whom we derive protection and a sense of security (Bowlby, 1979; 1982). Moving from its root in child psychology, attachment theory is increasingly being applied to organisations (Richards & Schat, 2011; Paetzold, 2015) and for Bowlby (1973; 1980; 1982; 1988), attachment is a behavioural control system of interpersonal relationships that individuals develop in infancy and which continues throughout life. Attachment is a

control system that establishes what are called ‘internal working models’, which are similar to a schema or a mental model and this is seen to develop and influence the individual's response and the nature of his or her interpersonal relationships in adulthood (e.g., Mikulincer & Shaver, 2016). In the team context, there is the notion of team mental models or schema (e.g., Mohammed, Ferzandi, & Hamilton, 2010; Rom, 2008) and it is suggested that attachment working models may influence these (Rom, 2008). This current research develops the notion of team attachment styles as an individual's mental representation of their attachment to the team and as an influence on their perceptions of their team processes and these mental representations, or attachment styles, are the individual's patterns of response in their team relationships. Significant variance in adult attachment exists as individual differences in attachment schema or working models, there are differences in the target of the attachment, and therefore there is both within person and between person variability in attachment (Mikulincer & Shaver, 2016).

These attachment patterns are based on the cognitive, emotional (affective), and social development of the individual and their tendency to either move away from or move closer to, those significant others when needing to seek safety and security (Grossman, Grossman & Waters, 2005) and the individual's attachment style behaviours affect interpersonal relationships in predictable ways (Hazan & Shaver, 1990; Rahimnia & Sharifirad, 2014). This view could be criticised as being overtly deterministic with a reliance on a key central figure and that these relationships influence other relationship and outcomes and that may be too traditional and focused on a stereotypical view of relationships. However, the primacy of these attachments have been empirically shown to be important in early and later life (Mikulincer & Shaver, 2016). These working models are created early in life and affect behaviour later, however, they are not immune to change, which is explored later.

Attachment theory proposes that human beings are born with this inherent psychobiological attachment behavioural system, and this system accomplishes basic regulatory functions such as protection from threats and easing of distress in human beings of all ages, but it is most directly observable during infancy and early childhood (Bowlby, 1982, 1988). This attachment view also described important individual differences in attachment-system functioning depending on the availability, responsiveness and supportiveness of attachment figures. Interactions with attachment figures that are available and responsive in times of need facilitate the optimal functioning of the attachment system and promote a sense of attachment security. This pervasive sense of security is based on implicit beliefs that the world is generally safe, that attachment figures are supportive when called upon, and that it is possible to explore the environment curiously and engage effectively and agreeably with other people (Bowlby, 1982).

Over time, individuals develop a mental record of their efforts to achieve proximity and comfort from their attachment figures in different social contexts, including the successes or failures of prior contact-seeking attempts. This is of vital importance to the workplace as it is how we frame ourselves and others, and this then shapes our interactions with others. These working models are seen to have two primary components (Bowlby, 1973). Firstly, it is a model of significant others (i.e., attachment figures), which includes their past responsiveness to bids for proximity and comfort. It is argued in this research that a team can act as an attachment figure in this context. Secondly, it is a model of the self, which includes information about the self's ability to achieve sufficient proximity and comfort along with one's value as a relationship partner, or in a team, or others in general and this model of self may shape the nature of the experiences and relationships with the team (Rom, 2008).

This notions of adult attachment styles, and much of the development and work into attachment styles in organisations, has drawn on the initial research into attachment patterns

by Ainsworth who developed the basic patterns of attachment theory (Ainsworth et al., 1978; Hazan & Shaver, 1987). The work of Ainsworth underlies much of the current applied research and her contribution is thus examined below, as the methodological development of measuring and creating a categorisation of attachment patterns in workplace settings flowed from Ainsworth's work allowed for the research to be developed (Ainsworth, 1967; Hazan & Shaver, 1990). Ainsworth's innovative methodology made it possible to verify some of Bowlby's ideas empirically and to develop attachment theory as she not only constructed the notion of different attachment styles, but also contributed to the concept of the attachment figure as being a secure base from which an individual can explore the world (Ainsworth & Bowlby, 1991; Ainsworth et al., 1978). These concepts then formed the basis of many developments in later adult attachment theory research (Hazan & Shaver, 1987; 1990) and have consequences for the workplace. Three distinct patterns or styles of attachment are noted, which have been termed secure, anxious-resistant or ambivalent, and avoidant and are stable, personality-like influences (Ainsworth et al., 1978).

These attachment styles are working models of self and others and they shape the way we see ourselves, the way we see others and the way we see relationships thus enabling us to predict how a person may respond in relationships. The dynamics of the three patterns are: the secure style, which has confidence in the availability of significant figures, and is comfortable with closeness and intimacy, interdependence, and trust; the anxious/ambivalent style, which is seen to have conflicts between the strong need for intimacy on the one hand and insecurity about the responsiveness of others to one's needs and fear of rejection; and the avoidant style, which is insecure of the intentions of others and prefers to keep an emotional distance (Ainsworth et al. 1978). This distribution of patterns is then seen in adulthood (Hazan & Shaver, 1990). It could be questioned if the experiences of early childhood then act to influence all subsequent behaviours, including in adulthood and at in the work place.

However, the volume of research into adult attachment indicates that it is influential in many spheres of life (Mikulincer & Shaver, 2016). This work by Ainsworth is also important for the present research as it serves as the foundation of the adult relationship attachment style and its measurement which we examine in the context of the workplace and teams. Attachment style has been conceptualised and measured using three categories (e.g. Hazan & Shaver, 1987) and it has been debated whether attachment is best seen as a categorical construct or rather as a dimensional, or continuous, construct (Fraley, Hudson, Heffernan, & Segal, 2015). A potential critique of the categorical approach is whether all individuals can successfully be categorised into one of the attachment types as it has been suggested that the degree to which an individual's sense of self-worth is internalised corresponds inversely to the level of need for external validation (i.e., dependent behaviour or anxiety related to abandonment) and therefore needs to be seen as a continuous variable (Bartholomew, 1990; Fraley et al., 2015). The degree to which the 'other' is perceived as available and responsive corresponds inversely to the level of avoidance of emotional intimacy.

Subsequent studies have supported this two-dimensional construct underlying adult attachment styles (e.g., Bartholomew & Horowitz, 1991; Brennan, Clark, & Shaver, 1998; Fraley & Waller, 1998) and some of this work has seen the development of the notion of four attachment 'types': Secure; Dismissive; Preoccupied; and Fearful. These four emerge from this focus on a two-dimensional attachment conceptualisation, consisting of attachment anxiety and attachment avoidance (Brennan, et al., 1998; Mikulincer & Shaver, 2005b). However, much of the work in workplace research has remained with the classification of anxious, avoidant and secure attachment (e.g., Richards & Schat, 2011) and avoids the use of types or categories given its lack of precision (personal communication, Brennan, 2014). The model used in this current research sees commonly accepted idea of two attachment styles, namely avoidance and anxiety attachment, which is measured on a continuous scale as

suggested as the most suitable approach to conceptualising attachment styles (Brennan et al., 1998; Mikulincer & Shaver, 2016). Secure attachment is determined by absence of anxiety and avoidance - i.e., low scores on these two attachment dimensions are seen as secure attachment, and higher scores indicates insecure attachment patterns. This differing conceptualisation may lead to confusion in the use and interpretation of attachment theory. However, the consensus in the attachment research literature is that there are two dimensions of attachment styles; anxious attachment and avoidant attachment (Fraley et al., 2015; Gillath, Karantzas & Fraley, 2016) rather than categories of attachment.

Since the original work into attachment theory, there have been a number of developments in the field and an expansion into other areas such as adult attachment, mostly starting with the issue of romantic attachments and a summary of the key developments in attachment theory is given in Table 2.1 below. There have been a number of applications of adult attachment and two recent emerging themes are the use of priming in attachment interventions (e.g. Mikulincer & Shaver, 2005b; Mikulincer, Shaver, Gillath, & Nitzberg, 2005) and the other is the integration of neuroscience methods and theories with more traditional approaches (Beckes and Coan, 2013). The neuroscience view is still emerging and may be seen as being at odds with the more traditional views which emphasis the role of the environment (Beckes and Coan, 2013). However, these developments show that the field is developing and expanding in its focus of applications.

Table 2.1 *Key developments in attachment theory*

Author	Contribution	Significance
Bowlby (1969; 1978; 1982)	Founder of attachment, key ideas developed	Blueprint for the theory, idea of working models, notion of secure attachment
Ainsworth (1967); Ainsworth et al. (1978)	Innovative methodology developed; concept of the attachment figure as a secure base from which an infant can explore the world, identified 3 styles (secure, avoidant and anxious)	Developed methodology so could empirically test theory; developments were the basis of current applications to work context
Hazan and Shaver (1987)	Adult attachment empirical application to adult context - romantic relationships	Application to Adult context; Self report measure developed, measure of attachment-system functioning in close relationships
Hazan and Shaver (1990)	Secure base work; work is functionally similar to what Bowlby calls "exploration"	First empirical application to workplace context, secure base proposed as useful for work context
Bartholomew and Horowitz (1991)	two underlying dimensions of adult attachment — internal model of self-positive or negative) and internal model of others (positive or negative)	Attachment as actual beliefs (working models) that people have
Mikulincer, Gillath, & Shaver, (2002)	Use of security priming techniques	Experimentally priming mental representations to achieve security
Cozolino (2006); Beckes and Coan, (2013)	Application of neuroscience	Focus on micro level using neuroscience methods

There are other competing theories which explore close relationships and some are critical of the social psychological and individual differences viewpoint, such as the post-modern views of Gergen (2011), and the discourse-analytical view (Potter & Wetherell,

1987), which do not accept the more positivist oriented individual differences perspective. Within the individual differences perspective there are also some related alternative approaches, for example the self-determination theory (SDT) view and proponents of SDT have argued for the SDT framework over attachment theory as a model for close relationships (e.g. Ryan, Brown and Creswell, 2007). While both attachment and SDT are individual focused, SDT has a focus on the individual's needs, and an emphasis on what is called autonomy support which is created through positive and facilitative relationships. In these relationships, individuals are responsive to the others' perspective and not controlling of their behaviour (Ryan et al., 2007) and the existence of autonomy support is similar in nature to the notion of *secure* attachment.

However, although attachment theory includes this idea, attachment goes further by also focusing on the perception that the individual has about the perceived nature of their relationships through their own internal working model, and others. This is the usefulness of the attachment perspective and its potential use in organisations as it provides a useful diagnostic approach and useful directed interventions as a result. Nonetheless, some studies have argued and shown these two and other related frameworks may actually be complementary rather than competing (La Guardia & Ryan, 2007; Kormas, Karamali & Anagnostopoulos, 2014). Indeed, La Guardia, Ryan, Couchman & Deci, (2000) using multilevel modelling in order to differentiate attachment theory from SDT's focus on basic need fulfilment, supported the view that each of the two theories contributed different and complementary insights into close relationships. While each theory of close relationships has useful insights, attachment styles offer a framework to classify more specifically interactions and relationships, and this aids both in understanding relationships and in developing any interventions. As noted attachment theory may provide a diagnostic model and provide insight how the various differing styles may interact. However, there are possible critiques of

this attachment approach to understanding relationships. For example, a potential criticism could be attachment theory has a strong focus on the internal working models or attachment style, which may lead to simple and determinist thinking about the causes of organisational behaviour, and possibly a tendency to see the individual as the central or core explanatory factor in work relationships. This could potentially ignore issues such as the political, social and organisational social structures of society and organisations, for explaining current and future individual and organisational behaviour. The criticism lends to the view that attachment theory potentially may support the status quo in organisations by accepting that internal working models exist and have a causal relationship with behaviour and not investigate other factors. Related to this, is that the classification of a person in attachment style may lead to ignoring the situation by both researchers and practitioners.

However, since this current research's aim is to add to the adult attachment paradigm, this methodological issue is beyond the scope of the current research, however, there is a large amount empirical evidence for the role of attachment style to explain organisational behaviours. It may be seen that the wider contextual and ecological issues are not given much emphasis and issues, such as power and class, do not have a central role in the attachment view. However, the notion of attachment theory is a focus on both the environment and the interpersonal relationships between the individuals, and their expectations about the nature of those relationships. This is potentially important to the success of organisations, so it follows that the focus on interpersonal relationships by attachment may be useful in the interpersonal domain of organisations. Attachment theory stresses the importance of understanding the meaning of the various team member's behaviour within an individual differences paradigm, and this current work aims to add to this paradigm. Extensive empirical work such as that of Richards & Schat (2011), Mikulincer & Shaver (2016) and Harms (2011), indicates the value of the attachment

perspective for organisations. The potential benefit of understanding the influence of different styles may add to a deeper understanding of organisations and the need for positive workplaces to ensure healthy and productive workplaces.

That attachment theory has been criticised for placing too much focus on the individual, not enough on the interdependent nature of relationships and the suggestion that more work on the actual relational interactions is needed (Holmes & Cameron, 2005) may not be fully understanding the nature of attachment. This potential criticism can be defended as the attachment framework is about the individual and is concerned with the inner life of the individual, and it is a theory about how we shape our relationships and how relationships influence our lives. Although it appears to be focused on the individual, attachment explores processes at the dyadic and more, such as in groups and organisations (Mikulincer & Shaver, 2016) and the influences on these. Attachment theory provides another layer and adds to the understanding of relationship processes, from an individual differences perspective. Furthermore, attachment theory actually provides a highly integrated and comprehensive account of relationships and deals with the cognitive, effective and behavioural aspects of interpersonal processes. It also explores how previous experiences shape current relationship functioning. It shows how our attachment perspectives may guide our interactions both now and in the future. Attachment implicitly and explicitly has a strong focus on the individual's environment.

Consequently, this current research aim is to develop the research around attachment style's theoretical and practical work in relation to teams. This is pertinent since attachment theory perhaps offers a more comprehensive relationship based and oriented perspective for teams. It also does not see the individual in social isolation, rather acknowledges the broader context from families and group dynamics in early life, to the interaction with others and other systems in later life including the work team. Attachment may offer a useful tool for

teams as it is a schema of our expectations about ourselves and others in interactions with teams and others in organisations.

Overall, the research into adult attachment has been guided by the assumption that the motivational system that gives rise to the close emotional bond between parents and their children is responsible for the bond that develops between adults in emotionally intimate and close relationships (e.g., Doverspike, Hollis, Justice, & Polomsky, 1997). These emotion regulation strategies have consequences for interpersonal interactions and relationships (Diamond & Aspinwall, 2003; Mikulincer, Shaver, & Pereg, 2003). For the workplace, this system is seen to guide an individual's interactions with others (e.g., Harms, 2011). In adults, this is similar to a schema or mental map that shapes our perceptions of others and ourselves and we therefore act accordingly. Attachment anxiety and avoidance are associated with various organisational outcomes and problems such as negative health outcomes, issues in leader-follower relationships and increased turnover intentions (Paetzold, 2015; Mikulincer & Shaver, 2016).

It is argued that, as in childhood, when attachment figures in adulthood are not reliably available and supportive or fail to provide adequate relief from distress, they cause the individual who is dependent on them to form negative working models of self and others and to develop defensive secondary attachment strategies. In the attachment process, direct security-seeking is viewed as the primary strategy. If this fails, then the secondary attachment strategy is formed and this takes two major forms: hyper activation, which is to intensify the system's primary strategy; and deactivation of the attachment system which suppresses or down-regulates the primary strategy (e.g., Cassidy & Kobak, 1988). Both these strategies lead to more negative thoughts and less creativity in handling problems and stressful situations. Those high in anxiety tend to hyper activate the attachment system to

constantly seek attention, while those high in avoidance deactivate the attachment system to protect themselves from relying on others (Mikulincer & Shaver, 2003).

Anxious attachment orientation is characterised by increased hyper activation of the attachment system and corresponding emotion regulation strategies such as hypervigilance and overly negative reactions towards interpersonal or emotional threat. Hyper activating strategies foster anxious, hypervigilant attention to relationship partners and rapid detection of possible signs of disapproval, waning interest, or impending abandonment and are associated with exaggeration of the appraisal of threats, negative views of the self, and pessimistic, catastrophic beliefs about transactions with other people and the non-social world (Bartholomew & Horowitz, 1991; Mikulincer, 1995; Florian & Mikulincer, 1998). There is a tendency to react to stressful events with intense distress and to ruminate on threat-related worries, a tendency to detect threats in nearly every transaction and to exaggerate the potential negative consequences of these threats (Mikulincer & Florian, 1998). Representations of attachment figures and attachment-related worries are activated even when there is no external threat (Mikulincer, Birnbaum, Woddis, & Nachmias, 2000; Mikulincer, Gillath, & Shaver, 2002). Anxiety assesses the degree to which individuals worry about being underappreciated and possibly abandoned by others. Individuals who score higher on anxiety claim to be highly invested in their relationships (sometimes to the point of enmeshment), and they yearn to get closer to their partners and feel more secure in their relationships. Anxiously attached individuals possess a negative view of the self, leading to hyper activating strategies such as being over-dependent on others (Mikulincer & Shaver, 2005a) and hypervigilant to social and emotional cues from others (Fraley, Niedenthal, Marks, Brumbaugh, & Vicary, 2006).

Therefore, in teams, the anxiously attached tend to hold negative self-views and have guarded but somewhat hopeful views of others (Bartholomew, 1990; Hazan & Shaver, 1987).

They may see team tasks as threatening, have low self-efficacy and display poorer instrumental functioning in teams. Their perceptions lead anxious persons to question their worth as relationship partners, resent how they have been treated in past teams and work relationships, worry about losing their team partners, and remain vigilant to signs that their partners or significant others at work could be pulling away (Cassidy & Berlin, 1994). Consequently, the central goal of the anxiously attached person is to increase their deficient level of felt security (Mikulincer, 1998). This sometimes leads them to behave in ways that smother or scare others away. Because anxious people are uncertain about whether they can truly count on others to be available and supportive when needed, their working models amplify distress, which often makes them feel even less secure in their relationships. At the same time, however, they want to believe that their attachment figures may eventually be attentive and responsive. As a result, anxious people rely on 'emotion-focused' (Lazarus & Folkman, 1984) or 'hyper activating' (Mikulincer & Shaver, 2003) coping strategies when they are distressed. These strategies sustain and sometimes escalate their concerns, worries, and cognitive ruminations, which keeps their attachment systems activated for longer periods of time. Each of these characteristics explains why anxious individuals tend to be involved in less satisfying, poorly adjusted, and more turbulent relationships at home and in the workplace (Feeney, 2008). Anxiety is associated with the use of more negative emotional, cognitive and behavioural regulation strategies. In the workplace team, this style can manifest itself in inappropriately seeking approval, worrying about acceptance in the team and fear that there is not enough support from the team.

The avoidant attachment orientation is typically associated with the deactivation of the attachment system and with suppressing and limiting accessibility to emotional memories and thoughts (Mikulincer & Shaver, 2007a). The deactivation of the attachment system avoids frustration and any further distress caused by attachment figure unavailability. This

results in: denial of attachment needs, avoidance of closeness, intimacy and dependence in close relationships, maximization of cognitive, emotional, and physical distance from others and a striving for self-reliance and independence. This may include literal and symbolic distancing of the individual from distress whether it is directly attachment related or not. This can also involve active inattention to threatening events and personal vulnerabilities as well as inhibition and suppression of thoughts and memories that evoke distress and feelings of vulnerability. As avoidance reflects the degree to which individuals feel comfortable with closeness and emotional intimacy in relationships, those who score higher on avoidance claim to be less invested in their relationships, and they strive to remain psychologically and emotionally independent of others. Furthermore, avoidantly attached individuals will view others as unavailable, unresponsive, or punishing (Bowlby, 1973; Mikulincer & Shaver, 2005b), leading to what has been referred to as deactivating strategies, such as denying the importance of relationships and avoiding emotional intimacy (Mikulincer & Shaver, 2005a). In the team context, therefore, we can expect that avoidant individuals will see themselves as independent of their team and possibly see themselves as outside of the team as the team will be perceived as unavailable. They see closeness to the team as unnecessary and avoid interdependence with teams (Keating et al., 2014). These individuals may perceive team tasks to be unchallenging and display poor instrumental and socio-emotional functioning in these tasks and prefer to pursue autonomous tasks (Lavy, Littman-Ovadia, & Bareli, 2014; Lavy, Bareli, & Ein-Dor, 2015).

In summary, the current research develops and extends the notion of a team attachment style. Building on attachment research, it is suggested that those with higher team attachment avoidance may tend to dismiss the team and might be more likely to leave the team if allowed. It has been shown that these individuals avoid intimacy with their teams, and neither identify with the team that they work with nor seek social support from the team

(Lavy et al., 2015; Rom & Mikulincer, 2003; Smith et al., 1999). Individuals who have high team attachment anxiety report less satisfying social support within teams and tend to be preoccupied with either being accepted or rejected by the team. These individuals are hypersensitive to their emotional reactions to the team, which often includes anxiety, fear, disappointment, depression and self-esteem (Holtz, 2005; Marmarosh et al., 2006; Rom & Mikulincer, 2003; Smith et al., 1999). Attachment to teams is displayed in an individual's beliefs about themselves as valued or less valued group members, along with their beliefs about the group's acceptance or rejection of them (Rom, 2008; Smith et al., 1999; Smith, Coats & Murphy, 2001). More specifically, when individuals have positive beliefs about themselves as worthy members of a group and view the group as accepting of them, they are referred to as having secure affectional bonds to the team.

Securely attached individuals tend to have low levels of attachment anxiety and avoidance and are more likely to view themselves as worthy and others as trustworthy. They display low anxiety and low avoidance which leads to greater security, resiliency, and ability to manage adversity by drawing upon internal coping resources and support from others (Mikulincer & Florian, 1998; Mikulincer & Shaver, 2005b). Secure individuals are comfortable depending on others and having others depend on them in return. They enjoy closeness and emotional intimacy in relationships and they do not worry about their significant others or partners withdrawing from or leaving them. Because security is defined as scoring lower on avoidance and/or anxiety, inferences about attachment security in adult attachment studies focus on how people who score lower on avoidance and/or anxiety respond to different situations. Securely attached adults, for example, tend to have more positive views of themselves and close others (Bartholomew, 1990; Hazan & Shaver, 1987), which helps them develop and maintain more positive, optimistic, and benevolent views of their partners and relationships (Hazan & Shaver, 1994a; 1994b). The overarching goal that

motivates securely attached people is to build greater closeness and intimacy with their attachment figures (Mikulincer, 1998). Because secure people are confident that their attachment figures are, or will be, available, attentive and responsive to their requests for support, they directly turn to others for help when distressed. By adopting this 'problem-focused' coping strategy (Lazarus & Folkman, 1984), secure people are able to deactivate their attachment systems more quickly and completely than insecure people, allowing them to resume other important life tasks (Mikulincer & Shaver, 2003). As a result, securely attached people spend comparatively less time, energy, and effort dealing with attachment-related issues. All of these characteristics allow secure people to have relatively happier, better functioning, and more stable relationships (Feeney, 2008). It therefore follows that, for the securely attached, the functioning of the team is less likely to be a source of concern, whereas this is possibly not true of the anxious or avoidant (insecurely) attached individual.

A possible limitation of the use of attachment theory may be that in its use there is a tendency to focus on the internal world and assume that this is the primary mechanism for relationship behaviours. The attachment view may thus be seen as having a rather narrow relational focus which may support the status quo of modern industrial organisations by ignoring the many ecological and environmental variables that possibly also shape relationships. Therefore, a possible criticism is whether the attachment framework is too determinist and supports a rather narrow view of relationships? However, attachment theory does have a strong environmental focus and unlike the more traditional psycho-analytic views goes beyond issues such as drives, and emphasises the role of the environment (Bowlby, 1979). However, within this relational view it offers a useful tool to develop a positive and supportive workplace by the focus on the development of positive and supportive relationships. The attachment system is designed to promote survival as it functions to reduce fear and anxiety. Individuals are then free to pursue other important life tasks and

goals. Furthermore, another potential positive of attachment rather than see it as dysfunctional, is that that each of the different attachment dispositions - secure, anxious and avoidant - have positive qualities as well as negative (Ein-Dor, 2015; Ein-Dor, Mikulincer, Doron, & Shaver, 2010). The anxiously attached team member may possibly be more sensitive to threats and changes in environment and will therefore react more quickly or be able to anticipate future problems which may be a benefit to the team. These individuals may be more proactive because of their anxious attachment orientation. The individual is then not only seen as having dysfunctional behaviours, rather some useful role to play in the organisation (Ein-Dor, 2015).

Overall, it is suggested that the team within an organisation can act as a symbolic security-enhancing attachment 'figure' and individuals can form secure attachments within their team. However, less secure individuals may have difficulty construing their team as being available, as the team might not be perceived to be a sensitive and responsive attachment figure (Smith et al., 1999; Mikulincer & Shaver, 2016). This current research argues that the less secure team members will have negative experiences of team exchanges and interactions. To this, is added the finding that attachment security or lack of it may be linked to Team Identification and engagement (Smith et al., 1999; Rom & Mikulincer, 2003). It is argued in this current research that hyper activation and deactivation strategies will be projected onto the team, and that this will contribute to lower identification, lower ratings of performance and a negative appraisal of the team interactions. This leads to the research proposition that insecure attachment (anxious and avoidant) styles will be negatively related to team experiences and exchanges. It is suggested by this current research that in many modern workplaces, teams can offer a sense of security and act as a secure base and that individuals may be close to teams as they offer a safe haven, as do leaders or significant others. Understanding an individual's attachment will provide deeper understanding of

behaviours that may appear to be irrational, for example, avoidant attachment individuals working long hours to avoid intimacy at home. In the work context it is argued that the modern organisation, with its flatter and more relationship-based nature, needs a deeper and more useful framework to understand and develop healthy organisations rather than those that focus only on overt behaviour.

2.3 Attachment in Organisations

The suggested use of attachment styles in this current research is to develop an original perspective on work teams by adding to the emerging group attachment perspective based on attachment theory (Mikulincer & Shaver, 2016). Much of the previous research on teams and groups has emphasised team-level dynamics and experiences and neglected the distinctive experiences and perceptions of individuals embedded in teams, and how the quality of their attachment to teams influences these experiences. The individual difference view investigating individual behaviour at work has focused on broad personality traits, for example, the five factor model and motivation (Harms, 2011). Despite the importance of these variables, consideration of individual characteristics that are more directly related to how people interact with other people possibly offers a more dynamic view of behaviour in organisations, and attachment theory thus offers the potential of enhancing our understanding of the nature of relationships and behaviour at work in a more dynamic model of human behaviour. The tenet is that attachment insecurities may be a major underlying cause for malfunctioning in many life domains, including relationships and work performance (Bowlby, 1973; 1978; 1979; 1980; 1982; Mikulincer & Shaver; 2016; Ronen & Mikulincer, 2012).

A summary of some of the key work applying attachment in organisations is given in Table 2.2 which illustrates the role of attachment theory in work settings. From an

attachment point of view, working is a relational act that requires the management of relationships in a wide range of applications.

Table 2.2 *Workplace applications of attachment*

Area	Studies	Secure	Anxious	Avoidant
Leadership	Davidovitz et al. (2007); Popper & Mayseless (2003)	Positive about being a leader, stronger and wiser role	Focus on own needs, more dictatorial style	Lower socialised style, more personalised leadership style
Leader Member Exchange	Mayseless (2010); Thomas et al., (2013)	Positive leader-member exchange	Poor quality leader-member exchange	Negatively related to leader-member exchange
Organisational Citizenship Behaviour	Geller & Bamberger (2009); Little et al., (2011); Schusterschitz et al., (2014)	Likely to show prosocial / Organisational citizenship behaviours	Lower levels of Organisational citizenship behaviours	Lower levels of Organisational citizenship behaviours also counterproductive behaviour seen
Group Processes	Smith et al. (1999); Rom & Mikulincer, (2003)	See group in positive way, open and secure in group	Negative affect and emotion towards group	Negative appraisal of group and lack of closeness
Career decision making	Braunstein-Bercovitz (2014)	Confidence in career decisions	Career indecision	Career indecision
Mentoring	Allen, Shockley & Poteat (2010); Germain (2011)		Less feedback seeking and less feedback acceptance	Difficulties in seeking help from mentors, low levels of trust in potential supporters, less willingness to mentor
Feedback seeking	Evraire, Ludmer, & Dozois (2014); Hepper & Carnelley (2012)	Select most positive feedback	Fail to seek positive interpersonal feedback, pursues interpersonal over task/ competence feedback	Avoidant individuals seek negative feedback over positive
Trust	Frazier et al. (2014)	Positive relationship with trust	No significant influence on trustworthiness or trust perception	
Engagement	Little et al. (2011); Littman-Ovadia et al. (2013)	Higher levels	Inverse correlation with vigour and dedication	Inverse correlation with vigour and dedication

2.3.1 Attachment and Teams

In the application of adult attachment styles to teams, the first issue is whether the notion of attachment, which has been largely seen in terms of dyadic relationships, can be applied to collectives such as groups. The key issue is whether group and individual (global) attachments are related and/or two distinct concepts which was originally made by Bowlby (1982), however, the empirical support for this is the study of Smith et al. (1999) and the application of attachment to the collective and groups is now well established, and work in the area developed, as seen in Table 2.3, and need for further work supported (e.g. Mikulincer & Shaver, 2016). In Table 2.3 the studies indicate the application of attachment to collective contexts such as social groups, and also that they have tended to use dyadic or global attachment with measures such as the Experiences in Close Relationships (ECR), and no known study has explored the simultaneous influence of the global and collective, e.g. group or team attachment, on key outcomes to determine the relative influence of each.

This is important as the question is the focus of attachment and whether specific attachments are more useful than general or global attachment. The studies reviewed in Table 2.3 note only one group oriented measurement attachment approach (Smith et al., 1999), however, not to teams and with the majority of studies in the area exploring dyadic (global) attachments and their influence. This application of attachment theory specifically to the team context is a new contribution to both the team, and adult attachment literature as has been identified (Smith, Coats, & Murphy, 2001; Smith et al., 1999; Lee & Ling, 2007; Mikulincer & Shaver, 2016; Rom & Mikulincer, 2003; Rom, 2008). The attachment research into groups has provided useful insights and these have shown that groups and teams, may be sources of security, and groups may be viewed as attachment bonds (Mikulincer & Shaver, 2016). This attachment research has shown that individuals acquire differing views of themselves as group members which influence thoughts, emotions and behaviours to the

group (e.g. Smith et al., 1999). This was noted in a study with Israeli undergraduate students where it was found that there were working or mental models of the self as a group member and of groups, that groups were sources of social identity and esteem (Smith et al.,1999). However, this study focused on students rating their most important social group or an important fraternity or sorority group and the application to the work context therefore limited. The studies conducted by Smith et al. (1999), did confirm that dimensions of attachment to groups, i.e. attachment anxiety and attachment avoidance were evident and these group-oriented attachment factors were seen as distinct from global (individual) relationship attachment and from other measures of group identification. This group attachment predicted group engagement, evaluation, and identification and individuals high in group attachment anxiety and avoidance scored markedly lower than their secure peers in group activity engagement, expressed more negative evaluations and perceived less support from their groups. Further, group attachment anxiety was related to stronger emotional reactions directed at the group while group attachment avoidance was linked with lower levels of positive affect and identification with groups (Smith et al., 1999).

The study only explored group level attachment and not individual level attachment on these variables. Therefore, this current research proposes to build on the existing group attachment research, and adds an novel investigation with both global (individual) styles and group attachment styles as joint influences to determine their relative influence on the study variables. Furthermore, as seen in table 2.3 below, these group attachment studies have tended to use a student sample, rather than an organisational context, which does limit the generalisability of the findings. These studies also tend to focus on attachment to social groups and not workplace teams. Overall then this area of research indicates that person-to-group bonds may differ from close interpersonal relationships, however, additionally there is

a need to remain emotionally close and to seek support from social groups (Smith et al., 1999).

A further key theme in the group oriented attachment research is that the individual and group attachment behaviours tend to be similar and that attachment to groups reflects the attachment in interpersonal relationships. The empirical data into the area has found an influence of individual attachment style on development of group attachment style, perception of group cohesion and group task performance, or differences in group functioning (Rom and Mikulincer, 2003; Rom, 2008). A series of four studies, two with undergraduate students and two with Israeli military trainees, Rom & Mikulincer (2003) found that overall individual attachment style influences the formation of group attachment style, perception of group cohesion and group task performance. Individuals reporting higher levels of attachment anxiety and avoidance tended to report lower self-evaluation of functioning in group activities (performance), and attachment anxiety was associated with lower instrumental functioning (i.e. contribution and goal accomplishment) while avoidant adults scored lower in socio-emotional functioning. The avoidant adults' negative view of others may have caused them to distrust the motives of group members and thus express little interest in interacting with their group despite the potential benefits that can be derived from the group. However, it was found that high levels of group cohesion lessened the negative effect of attachment anxiety on self-evaluations of instrumental and socio-emotional functioning in the group (Rom & Mikulincer, 2003). The argument made was that group cohesiveness may provide a sense of approval and security which may satisfy attachment needs and thus facilitate a focus on group tasks. Group cohesion was not seen to moderate the negative effect of attachment avoidance on self-evaluations of instrumental and socio-emotional functioning in the group (Rom and Mikulincer, 2003). This is in line with an avoidant adult's tendency to be disinterested in others and non-responsive to relationships in

general. Furthermore, it was found that in highly interdependent group activities, avoidant adults deactivating regulatory strategies failed to suppress their emotions resulting in lower instrumental functioning (Rom & Mikulincer, 2003). A limitation of this particular study was that again it was a focus on social groups and the studies use university students or military trainees as participants. This need to develop studies in actual teams and not groups has been noted and a study using a sample of 89 undergraduates to explore individual differences in team-related mental representation was undertaken (Rom, 2008). The difference in this study was that the participants all had some previous experience of belonging to command-and-control teams from their military service, although currently they were all university students. However, they were still teams artificially formed for the study and in a university context which may limit the generalisability of these findings. The study found that avoidance was significantly linked to lower contribution and goal accomplishment and fewer positive and more negative beliefs regarding teams. Those in the study with higher anxiety were linked with lower cognitive complexity in their team mental representations. Individuals with higher avoidance tended to have lower levels of mental differentiation (Rom, 2008). However, the effect sizes of the predictors accounted variance between 25% to 7% in the outcome variables.

Overall, the findings by Rom (2008) indicated that insecure attachment is associated with lower perceptions of team performance and dismissal of team interactions. The sample was, however, still a university context with students, completed in class time and asked participants to reflect on a prior team experience. Nonetheless, it did still add to the data about the role that attachment may potentially play in teams rather than in general groups. It could also be argued that the prior experience of working in any team and those team interactions contributes to the internal working model, or attachment style, towards teams,

and that a student and military context does not truly mirror the teamwork context of an organisation.

A final theme is that not only do the same fundamental dimensions that underlie interpersonal attachment underlie an individual's emotional bonds with their social group, there are individual differences in the way an individual may relate to their group or team, and these are the individual differences in interpersonal attachment style (Rom & Mikulincer, 2003). The attachment work has explored whether and how attachment styles influence employee group interaction and this is seen as the way forward in group or team related attachment research (Davidovitz et al., 2007; Rom, 2008; Paetzold, 2015). It has been found that avoidant attachment has been shown to have significant negative effect on an individuals' appraisal of group cohesion and instrumental functioning in group activities, given they lack the skills and motivation to act as effective caregivers they are less likely to be chosen as a first source of support by their co-workers (e.g. Geller & Bamberger, 2009).

Secure adults are seen to view themselves as effective team members (Smith et al., 1999; Richards & Schat, 2011) and engage in greater support seeking behaviour than their avoidant peers (Richards & Schat, 2011). From this the focus on understanding how the perceptions, attitudes and behaviour in group interaction vary in a manner consistent with their attachment style can be seen to be a useful development needed in the area. This focus, although still with a group-oriented view was further developed by Erez et al., (2009) who looked at attachment styles and differences in responses to group respect and disrespect from an in-group in a study with 198 students who participated in an experiment and were assessed on attachment anxiety and avoidance. They then performed group tasks, and received high, average, or low respect feedback from group members. At the end of the task, data was collected on participants' willingness to financially contribute to their group. The study found that for participants scoring relatively high on attachment anxiety, high group respect

heightened group commitment and effort expenditure on behalf of the group, whereas group disrespect led to lower group commitment but to more money donation to the group and higher effort expenditure. Participants who scored relatively low on attachment anxiety were not affected by group respect or disrespect. The study showed the importance of attachment theory for exploring individual differences in the context of group behaviour. It demonstrated that feelings of belonging and engagement in groups were dependent on a person's attachment style, however, not in a workplace setting. A similar study was conducted by Crisp et al., (2009) in the UK with a sample of 112 female psychology students, which found that those with higher levels of attachment anxiety have a tendency to lower their level of identification with friendship groups when an interpersonal relationship is threatened and when the friendship group might be most beneficial as a source of support. There is also some evidence for the effects of the heterogeneity of attachment styles on team functioning, as in a study with a sample of 52 university student project teams, and team cohesion, subjective team functioning, and team performance explored (Lavy, et al., 2015).

It was found that a team's heterogeneity was associated with better performance and more positive team evaluation when team cohesion was high (Lavy et al., 2014). In other words, where teams had a strong within Team Identification, they tended to perform better. However, these studies again had students as a sample and in the Crisp et al., (2009) study, only female participants. Whilst these studies discussed above and those noted in Table 2.3 have illustrated the importance of attachment in group processes and extended earlier studies, such as Smith et al., (1999) and Rom and Mikulincer (2003), most group oriented studies have not been in a workplace context and they tended to use university students rather than employees and there is a need for more naturalistic studies to increase the generalisability and application of attachment to the workplace. Some studies have used a more naturalistic setting or context issue, for example, a study of religious groups examined attachment and

cooperation and suggests that attachment relationships with a deity could be a mechanism for intragroup cooperation (Weingarten & Chisholm, 2009). However, the context here was not a workplace setting and again, the sample was social groups not work teams. As seen in the summary of studies in Table 2.3 there is a need for workplace samples and of work based teams (Mikulincer & Shaver, 2016; Paetzold, 2015; Rom, 2008), and there is also a need for group and team related processes to be studied beyond the group dynamics focus of the current group and team research (Forsyth, 2014; Paetzold, 2015). Group and team research is seen to be dominated by issues such as group cohesion which needs to be extended (Forsyth, 2014), and the gap in attachment research is around further development of adult attachment in organisational settings, and especially team insights (e.g. Harms, 2011; Paetzold, 2015) A related issue is the limited use of team oriented measures and Table 2.3 highlights this further gap as most studies have used global measures of attachment such as the ECR.

Table 2.3 *Attachment studies in group contexts*

Author	Construct	Anxious	Avoidant	Methodology	Scale:
Smith et al., (1999)	Group engagement, evaluation, identification in social groups.	Lower engagement and evaluations of others, lower perceived support	Lower levels of positive affect to group	Correlational, university students	SGSS; Smith et al., (1999)
Crisp et al., (2009)	Group identification	Withdrawal from groups, (lower identification)		Experimental, University students	ECR; Brennan et al., 1998)
Rom & Mikulincer, (2003)	Performance	Groups seen as threats; low self-efficacy in group tasks, interactions perceived as threatening, support love and security goals.	Group tasks seen as less challenging, evaluate others negatively, endorse goals emphasising self-reliance and interpersonal distance.	Correlational, University students, New military recruits	Mikulincer, Florian, & Tolmacz (1990)
Rom, (2008)	Mental representations	Negatively associated with cognitive complexity	Low levels of mental differentiation; more negative content and less positive and instrumental content	Correlational, University students	Mikulincer, Florian, & Tolmacz (1990)
Chen & Mallinckrodt, (2002); Mallinckrodt & Wang, (2004)	Group attraction and perception of others in counselling	No significant finding	Less attracted to group, less accurate appraisal of others	Correlational, University students	ECR; Brennan et al., 1998)
Erez at al., (2009)	Group respect /disrespect	No response to respect or disrespect.	Disrespect led to lower group commitment,	Experimental, University students	ECR; Brennan et al., 1998)
Lavy, (2016)	Group work in learning	Higher grades in group task	Not associated with students' grades	Correlational, university students	ECR; Brennan et al., 1998)
Santascoy, Burke, & Dovidio (2016)	Warmth in groups	No effect	Lower in stereotypical warmth	Experimental, students	ECR; Brennan et al., 1998)
Kogut, (2016)	Self-efficacy, and causal attributional style for achievement-related failures	Related to negative self-efficacy and maladaptive attributions for failures	Not related to academic self-efficacy, related to maladaptive attributions for failures	Correlational and longitudinal, students	Mikulincer, Florian, & Tolmacz (1990)

Moreover, the links of adult attachment to specific team processes such as TMX and Team Identification have not yet been fully established and so by investigating these areas, this current research will offer a new insight into attachment and teams. The current work around TMX and Team Identification has highlighted the influence of these factors on outcomes such as performance related variables (e.g. Banks et al. 2014). Therefore, the influence of attachment on exchange oriented variables will add to the understanding of teams and adult attachment. There are other issues that may be useful to explore, such as relationship conflicts in team and the impact on the task, however, these are beyond the scope of the current research which is to explore the team interactions and their influences.

2.3.2 Performance and Attachment

Performance is a key concern for all organisations, yet it is still not fully understood and the role of attachment and its relationship with performance is not yet clearly established (Joplin, Nelson & Quick, 1999, Neustadt, et al., 2011). A key issue is that the nature of performance is difficult to measure which both global measures and more specific measures being used. There are also differing contexts and so linking attachment theory to performance is complex. The work in the area therefore still finds that there is a need for more examination of the relationship between attachment orientation at work and job performance (Game, 2008; Neustadt et al. 2011). In a seminal study linking attachment theory to the workplace, Hazan and Shaver (1990) suggested a link with attachment orientation to work effectiveness and satisfaction, however, not directly to performance. They found that anxious attachment was associated with poorer work performance whilst avoidantly attached individuals tended to be overinvolved with work which resulted in effective work performance but disrupted home life. This study was based on a sample obtained from an advertisement in a local newspaper around a study for love and work and

they received 1000 replies, although the study was based on only 670 of those replies. The rather unusual sample design may be criticised for its approach and not having a clear population, not unlike a snowball sample. The attachment questionnaire was also a single item measure which only captured the attachment category or type but not the dimensions.

However, despite these limitations, this study has been a catalyst for the application of attachment to work. In other performance related studies, a US study of military trainees, Joplin et al. (1995) found that those with higher reported levels of what they called counter-dependent (avoidant) attachment style did not complete their officer training, and Quick et al., (1996) found those with higher score over-dependent (anxious) attachment style did not their complete basic training either. The sample of military trainees is a naturalistic setting, however, not a workplace and the measure of whether training was completed or not does not allow for other contributing factors such as physical strength. Again, the sample context is removed from a typical workplace context. A further study with 195 undergraduate students looking at academic performance, found no relationship between attachment and performance, however, as the researchers pointed out, they used academic performance as the measure, and this “may not be an effective proxy for performance at work” (Joplin et al., 1999, p. 790). The scale used in these studies was the Self-Reliance Inventory (Quick et al., 1992) which measures the three attachment dimensions independently. In another similar study with an undergraduate student sample, Daus and Joplin (1999) also did not find a link with performance, although the outcome variables were not strongly attachment related. The sample used in these were not workplace oriented and the measures of performance all varied.

In a rare study with those in workplace employment, data were obtained from 219 depressed clients, receiving psychological treatment for stress at work, and it was found that there were differences in orientation to work performance. This was linked to the two

insecure attachment orientations, with the anxious scale was significantly correlated with anxiety about work performance and relationships at work. Whereas, the avoidant scale found a correlation with concern over hours of work and difficulties in relationships at home and with social life (Hardy and Barkham, 1994). Although the sample were all workers, it was not a typical or representative workplace sample since they all had mental health issues.

In a more typical workplace representative research, a study with 211 managers in an international business in the hospitality industry was conducted (Neustadt et al., 2011) and secure attachment orientation at work was found to be statistically predictive of job performance, and not the other insecure styles (Neustadt et al., 2011). A strength of this study was that measures of job performance were independent of the study as they were provided by the organization rather than the individual and the ratings were part of the normal business practice, and were assessed on a six-point scale that consolidated achievement ratings against objectives. This study also used an attachment measure developed designed and validated for the workplace, the Adult Attachment at Work (AAW) scale different to the ECR (Neustadt et al., 2011). Although in a workplace setting this study showed differences in the relationship with attachment and performance, from previous studies and indicated the usefulness of attachment in exploring performance, which was supported in a study by Simmons, Gooty, Nelson and Little (2009), where performance of employees was again independently measured with a rating from the individual's direct supervisor. However, in this study from 318 surveys sent out, 203 usable employee responses were received and a total of 161 supervisor responses were received and of the 161 that could be matched to the employee respondents 83% were female. Although a limited, and with a female only, sample, the performance measure was a strength of the study as it contained an independent measure of performance, however, the sample may again not be seen to be typical of the workplace. The attachment measure was secure attachment and

measured with the Self-Reliance Inventory (SRI) (Joplin, Nelson, & Quick, 1999; Simmons, Nelson, & Quick, 2003), and no direct relationship between secure attachment and performance was found in the study (Simmons, Gooty, Nelson and Little, 2009). It was suggested in this work that the relationship between attachment and performance may not be directly linked, rather it may be influenced via a mediating variable. They suggest that process variables such as trust between supervisor and worker, “may be the mediator through which the benefits of a secure, healthy attachment style are translated into enhanced performance” (Simmons et al., 2009, p. 242). Therefore, the relationships with attachment and performance maybe best explored with both indirect and direct effects considered to fully understand the links with performance. Given the contested nature of these findings and as a response to this, the current research explores the nature of the relationship between attachment styles, team process variables and performance and performance-related variables and possible mediating factors or paths for the influence of attachment.

2.3.3 Job satisfaction

Job satisfaction is well studied and although contested, is seen as a proxy measure or indicator of performance (Locke, 1976; Judge & Ferris, 1993; Wanous & Hudy, 2001; Wanous, Reichers, & Hudy, 1997). There are many definitions and Locke (1976), stated it is “. . . a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (p. 1304). Overall, securely attached individuals have tended to report significantly higher job satisfaction with most aspects of their workplace (Hazan and Shaver, 1990) study. This is still a trend seen in recent work, for example as Towler and Stuhlmacher (2013) found in a sample of working women, those with an avoidance attachment style are likely to have intimate relationships that are low in satisfaction and cohesion as well as low-quality relationships with their supervisors. This study used a female only sample that was

educated with 84% having graduate or professional degrees. Attachment was measured with the ECR (Brennan et al., 1998) and job satisfaction with a 5-item index of job satisfaction. The advantage of this sample was that the participants were working, however, there was no random sampling and a female only sample limits the generalisability.

Attachment anxiety and avoidance have been seen to be related to lower levels of job satisfaction at the workplace (e.g., De Sanctis & Karantzas, 2008; Hardy & Barkham, 1994; Hazan & Shaver, 1990; Meredith, Poulsen, Khan, Henderson, & Castrisos, 2011; Pines, 2004; Ronen & Baldwin, 2010; Richards & Hackett, 2012; Ronen & Mikulincer, 2009; Ronen & Mikulincer, 2012). For example, Ronen and Mikulincer (2012) established that both leader and follower attachment insecurity contribute to employees' burnout and job satisfaction, and Richards and Schat (2011) highlight that secure individuals may form secure, supportive, and happy relationships with co-workers. It is suggested that anxiously attached individuals will be more prone to worrying about their relationships in the workplace and will generally report less job satisfaction along with higher stress and burnout, and avoidantly attached individuals may be less prone than anxious individuals to report job dissatisfaction. Other studies also that found securely attached individuals displayed higher levels of work satisfaction (Krausz, Bizman, & Braslavsky, 2001) and likewise, Sumer and Knight (2001), in a large sample of university employees, found that securely attached individuals reported higher levels of job satisfaction while anxiously attached individuals reported significantly lower levels of job satisfaction. Job satisfaction then has a useful role to understand the links between organisational factors and adult attachment.

2.3.4 Organisational Citizenship Behaviours

A widely used measure of performance proxy is Organisational Citizenship Behaviours (OCB) which has been shown to be important for organisational effectiveness

(e.g., Carpenter, Berry, & Houston, 2014; Organ, 1988; 1997). OCB is a term that incorporates anything positive and constructive that employees do, of their own volition, which supports co-workers and benefits the company (Organ, 1988; 1997). The concept of OCB was developed by Organ (1988; 1997) and his work into explanations for the non-relationship between job satisfaction and job performance (Organ, 1988). He defined OCB as “individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organisation” (Organ, 1988, p. 4). This definition of OCB has three key aspects. Firstly, the characteristic of discretionary behaviour which is performed by the employee as a result of personal choice. Secondly, the employee goes above and beyond that which is an enforceable requirement of the job description. Lastly, their behaviour contributes positively to overall organisational effectiveness (Organ, 1988; Organ, Podsakoff, & MacKenzie, 2006).

“Others have also defined OCB as behaviour that goes beyond the basic requirements of the job, is to a large extent discretionary and is of benefit to the organisation” (Lambert, 2006, p. 503-525), and as “employee behaviours that, although not critical to the task or job, serve to facilitate organisational functioning” (Lee & Allen, 2002, p 132). Organisational citizenship behaviour was proposed as an alternative form of performance, differentiated from traditional performance on the basis of its relative freedom from situational and ability constraints (Organ, 1988, p. 70). The concept has roots in Social Exchange Theory (e.g. Blau, 1964) which developed alongside the view that cognitions about treatment by the organisation would provide a cleaner and more efficient entrance into the link between employee attitudes and performance (Bergeron, Ostroff, Schroeder, & Block, 2014). In a social exchange perspective, individuals are willing to be involved in social exchange with people around them. They tend to do so in their personal life as well as in worklife (Blau, 1964). The relational nature of adult attachment seems well placed to offer insight into social

exchanges and their antecedents. For teams, it is suggested that those with positive team experiences will tend to have higher levels of OCB, given the positive exchanges in the team. There are several studies which have found a link between attachment theory and OCB. For example, Falvo, Favara, Di Bernardo, Boccato and Capozza (2012) in a study with 161 nurses in Italy found significant links with OCB. They applied a 16-item attachment scale, based on Mikulincer et al. (1990), which is, in turn, based on Hazan and Shaver's (1987) distinction of the three attachment styles. A key feature of this study was that as suggested in the attachment literature (e.g. Geller & Bamberger, 2009; Richards & Schat, 2011), the study used a mediation models to explain the influence of attachment.

A key theme therefore, is that attachment's influence on key organisational factors may not only be a direct association, rather a more complex relationship, and various paths, or mediating relationships, with key individual, group and organisational variables and outcomes. The idea of a simple association between key variables does not match the complexity of organisations, and more complex path models are suggested as being a more useful approach for research and practice (Preacher & Hayes, 2008). This research question explores the influences and pathways of the various team relationships which is a mediation relationship and allows direct and indirect relationships to be determined. It is not about the interaction or potential moderation influence of the role of the team variables, rather their antecedents and consequences and the pathways of influence which is a mediation model as suggested by the literature (e.g. Paetzold, 2015) that is the focus of this current research. It has been argued that attachment theory may be useful in organisations, and specifically in this research the team context and it may help us understand the cognitive schemas, somatic reactions, behavioural preferences and narrative patterns that individuals carry into adulthood (Rom & Mikulincer, 2003).

This thesis examines and adds to the work around teams and proposes that our connections with a team can be seen as attachment bonds (Maysless & Popper, 2007; De Haan, 2012a). Therefore, the aim is to explore the issue of the influence of adult attachment dynamics and styles in the team process and the quality of the team member's experience. Specifically, it argues that the individual's attachment style will influence our relations with others and it has been successfully considered in other workplace relationships (Mikulincer & Shaver, 2007a), with the team application adding to this body of work. The relevance of using attachment styles in organisations may be questioned because it is originally derived from research into childhood. However, the issue here is that we are looking at a behaviour pattern that has originated from and has roots in childhood, yet influences and constrains behaviour later in life. This latter element leads to the conclusion that this is not a valid criticism. Attachment styles are essentially the regularities or patterns in someone's behaviour; they are, in a sense, mental models that guide our interactions with others in all spheres of life, including organisations (Mikulincer & Shaver, 2016).

2.4 Measurement and Assessment of Adult Attachment

A variety of studies have considered how to effectively assess attachment styles and discussed the differing philosophies and measurement approaches (Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010; Shaver & Mikulincer, 2002; Mikulincer & Shaver, 2007a). They highlight and discuss two differing measurement and research approaches in the attachment theory field and these two differences could be seen as either a focus on a 'state of mind' or a 'mindful state' (Lopez, 2003).

The "State of mind" approaches are derived largely from the developmental psychology approach based on the work of Ainsworth et al. (1978) and this approach was extended by developmental psychologists and clinicians who used interviews to study

parents' state of mind with respect to attachment (Main, Kaplan, & Cassidy, 1985; Hesse, 1999) and the second is the social psychological approach (Hazan & Shaver (1987). Here the focus is more on a conscious "mindful state" and this approach uses self-report measures and tends to be quantitative. This research uses established self-report measures in order to further develop this perspective.

Overall, there can be three types of tests for adult attachment: interview, self-report typologies, and self-report dimensional questionnaires. The approach of Ainsworth et al. (1978) tended to see attachment as a qualitative and organisational construct and not as a dimensional one and in line with this the developmental approach largely employs the qualitative interview, called the adult attachment interview (Main, et al., 1985). While each of these competing two approaches or techniques discussed above can be used to assess an individual's attachment style, the differences in targets (e.g., parents/partners), methods (i.e., interview coding vs. self-report), and content do produce results that are unique (Shaver, Belsky, & Brennan, 2000) and sometimes substantially different (Roisman et al., 2007). The key difference between these two perspectives on measuring attachment seems to be that the clinical and developmental researchers' assumption that self-report measures, which they claim capture only conscious mental processes, cannot reach the depth which is revealed by the AAI. For some, a primary distinction between the AAI and self-reports of attachment style is that the two measures tap variation in security at different levels of accessibility, with self-report assessments reflecting "conscious attachment styles" and the AAI referencing "internalized, often unconscious, working models" (Roisman et al., 2007).

The more quantitatively oriented attachment view is that AAI researchers do not generally use rigorous research procedures and measures. Both lines of research deal with secure and insecure strategies of affect regulation, the latter sometimes called hyper activating and deactivating strategies. Both approaches are used to classify individuals into

categories similar to those identified by Ainsworth et al. (1978). However, researchers have found only limited associations between the two kinds of types of measures (Crowell, Treboux, & Waters, 2002; Shaver et al., 2000). The approach used in this current research follows a traditional positivist model. The more developmental approach was not used as the clinical approach and questions are seen to lack the face validity for acceptance in the workplace. Also, this research has chosen to expand on existing adult attachment research and its application to the workplace and this body of work has followed a quantitative social psychological model.

Some measures of attachment (e.g., Brennan et al., 1998; Fraley, Waller, & Brennan, 2000) tend to be dimensionally-based with individuals responding to a large number of attachment related statements. The dimensional models of attachment generally have two primary dimensions: attachment-related anxiety and attachment-related avoidance. The most commonly used measure of this is the ECR questionnaire (Gillath, et al., 2016; Karantzas & Fraley, 2016). The reason for its widespread use is possibly that it was one of first to provide scale which measured attachment as dimensions and in its initial construction was a synthesis using factor analysis of the existing scales of attachment (Brennan et al., 1998); it has been shown to be consistently valid and highly reliable (alphas > 0.90) in studies in various contexts, and been translated into 17 languages (Gillath et al., 2016; Mikulincer & Shaver, 2016). There have been subsequent developments and refinements such as the ECR-R (Fraley et al., 2000), ECR-RS (Feddern, Donbaek & Elklit, 2014), however, the original ECR is still seen as the key scale and used in most of the workplace applications (Mikulincer & Shaver, 2010; Richards & Schat, 2011). The original ECR was therefore used in this current research to measure global attachment. The scale consists of two independent continuous dimensions; avoidant attachment and anxious attachment. Secure attachment is indicated by low scores on both of these dimensions. In the ECR approach, individuals high on

attachment-related anxiety report greater anxiety with regard to whether others are available and responsive to them. Individuals high on attachment-related avoidance report disliking it when others open up to them emotionally and being less prone to relying on the support of others. Secure individuals would be those who are low on both of these two dimensions and report not only being more secure in terms of their expectations of others, but also more willing to be intimate with others and offer support when needed.

There is an consensus that attachment style measures which are derived from dimensional models of attachment style research are more precise than the categorical/typological approaches (Fraley & Waller, 1998), however, some continue to use a typological approach when describing attachment styles such as Mikulincer, Florian and Tolmacz (1990), as noted in table 2.3. This current research uses the accepted two attachment dimensions as continuous variables and as two independent variables and not as a categorical variable. Attachment dimensions are the conceptualisation of a construct as a result of answers to two independent scales (sets of questions), which are operationalised as two independent dimensions, leading to each individual obtaining two scores, one for anxious and one for avoidant. Secure attachment is a low score on both. If needed and desired, this can then enable categorisation of people into four types according to the combination of the two scores. However, this is not recommended as then four categories emerge and this categorisation may lack precision (e.g., personal communication Brennan, 2014; Fraley, et al., 2015). Attachment research and the use of the ECR and research has tended to focus on anxious and avoidant attachment. This approach does have a potential shortfall: the focus on avoidant and anxious attachment may be deficient in assessing security except in the absence of avoidance and anxiety (Mikulincer & Shaver, 2007b). There is also the issue of the focus of attachment: is it a unitary concept or are there different foci of attachment? This is important as relationship-specific mental models may have stronger and more numerous

associations with relationship-specific outcomes than the global (general) attachment or mental models. This issue is considered below.

2.5 Global versus Specific Attachment Styles

There is debate as to whether there is a general or global model of attachment, or whether it is specific and context or person dependent (e.g., Cozzarelli, Hoekstra, & Bylsma, 2000; Davis, Morris, & Kraus, 1998). This has implications for the measurement and practical use of adult attachment style and therefore this current research examines the relationship between global attachment, which is focused on the individual, or significant others, and team attachment. This then builds on the contested notion of a global versus a relationship specific attachment focus and explores this in the context of teams in the workplace. There is research which suggests that people possess both general and relationship-specific attachment models (e.g., Klohnen, Weller, Luo, & Choe, 2005; Overall, Fletcher, & Friesen, 2003; Pierce & Lydon, 2001). Overlap may exist across levels, but general and relationship-specific working models may predict different outcomes - for example, relationship outcomes may be predicted only by the corresponding relationship specific model and not by more generalised models (Klohnen, Weller, Luo, & Choe, 2005). Consequently, in this current research the concept of team attachment has been used to examine effective team functioning in the workplace.

Research on adults has shown the utility of applying attachment theory to a broader circle of significant others (e.g., Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996), whether or not they meet all of the criteria of attachment figures per se. Thus, working models of the self can reflect attachment figures or significant others more generally. For some, attachment theory further maintains that working models of the self and of others are complementary and intertwined (e.g. Collins & Read, 1994), which suggests that they exert

their effects simultaneously and Collins and Read (1994) were amongst the first to question the assumption of one attachment style and the notion of it as a stable dispositional variable. They proposed multiple mental models develop in response to personal experiences in different contexts and conceptualised adult attachment styles as a network of interconnected models organised with a default hierarchy. At the top of their hierarchical system is an attachment 'default mode' which corresponds to the most general representations held by the individual about themselves and others. This general mode could be applied across a wide range of situations and relationships but may not describe any one very well. Lower down the hierarchy, more relationship specific models exist corresponding to specific contexts such as teams or partner relationships. It has been found that individuals do not fit any one attachment prototype exclusively and they hold mixed tendencies across time, and within and across relationships (e.g. Bartholomew and Horowitz, 1991). It has also been found that general and specific dyad attachment relationships only modestly correlate and also relationship-specific attachments were more strongly associated with relationship-specific outcomes such as satisfaction, than within general attachment relationships (Cozzarelli et al., 2000).

There is a distinction between global and specific attachment relational models (e.g. Pierce & Lydon, 2001), and the suggested idea is that an individual's global model is useful in shaping their general tendency to have more positive or negative relationship-specific models. This work also shows that the distinction between global and specific models can prove to be useful in understanding the relative contribution of each model. In this current research, we therefore examine both a global (or individual) attachment and team attachment style so we can explore the relative influences of both.

Team attachment anxiety is seen as having a sense of being unworthy as a team member and worries regarding acceptance by the team. Team attachment avoidance has the

characteristics that individuals tend to judge closeness to teams as unnecessary and they tend to avoid dependence on groups. Higher scores on team-specific attachment anxiety or avoidance are proposed in this research to be related to lower identification with teams, stronger negative emotions toward teams, and lower perceived support from teams. This adds to the field as this has not previously been applied to work settings nor to the team context which has important differences from group contexts. It also builds on the proposals for such work into workplace teams (e.g., Lavy et al., 2015; Marmarosh, 2009; Mikulincer & Shaver, 2016). The concept of team attachment is developed in this current research and the argument is made that team attachment may underlie and influence many popular team constructs, such as team climate, team composition, team dynamics, member attitude towards the team and ultimately, individual and team performance. An overview of some team concepts below will frame and provide some context for the research and highlight the potential role of attachment styles.

2.6 Work Teams

The use of attachment styles in the work team context will also add to the team literature and a brief overview of relevant themes are discussed here as a background to the study. Notwithstanding the volume of research into work teams, over the years there is still little consensus on many issues including the definitions of key constructs (Dyer, 1984; Kozlowski & Bell, 2003) and there has been a multitude of models and research into the various factors and influences on teams and teamwork, which has been extensively reviewed and is therefore beyond the scope of this current research to review (c.f., DeChurch & Mesmer-Magnus, 2010; Klotz, Hmieleski, Bradley, & Busenitz, 2014; Ilgen, Hollenbeck, Johnson, & Jundt, 2005; Kozlowski & Bell, 2003; Kozlowski & Ilgen, 2006; Mathieu, Maynard, Rapp, & Gilson, 2008; Mathieu, Tannenbaum, Donsbach & Alliger, 2013;

McGrath, Arrow, & Berdahl, 2000; Salas, Stagl, & Burke, 2004; Sundstrom, McIntyre, Halfhill, & Richards, 2000). A key theme that has emerged is that a sense of group identity, a feeling of social support and cohesion that came with increased worker interaction is important to productivity (Dyer, 1984). The early research work also tended to focus on describing group dynamics (e.g., McGrath, 1964; c.f., Haythorn, 1953), and has more recently focused on themes such as how to actively design and manage teams to be more effective (e.g., Hackman, 1987; Turner; 2014; Yang, 2014). It is argued in this current research that adult attachment may provide an input into these issues. For instance from an attachment perspective different attachment styles may indicate how different individual difference factors could impact on teams, an example being an avoidant style may prefer to work alone rather than in the team with others.

There are numerous studies that highlight the different factors and processes that can impact teamwork (e.g., Cannon-Bowers, Bowers, & Procci, 2010; Kozlowski & Ilgen, 2006; Marks et al., 2001; Mathieu et al., 2008; Mathieu et al., 2013; Sundstrom et al., 2000), and these tend to highlight various contested areas in team related research and the need for further work into teamwork issues such as team coherence, team integration, and understanding of how issues such as how the team members individuals differing characteristics may contribute to team performance (e.g. Costa et al., 2014; Mathieu et al., 2013; Salas, Cooke, & Rosen, 2008; Mathieu et al., 2013). The attachment view can potentially add to these issues and for example an attachment view suggests that a heterogeneous group with different attachment styles each offer different advantages to the team, such as insecure team members may have a unique contribution to a team's functioning, not only in threatening situations but also in daily tasks as they tend to be more attentive to early signs of threats to the teams (Ein-Dor, 2014). There is some benefit to moderate attachment heterogeneity in a team versus a more homogenous team, however, it

may also be that high levels of attachment diversity are harmful to the team due to relationship related problems that may be created with the resulting team dynamic (Lavy et al., 2014). Attachment may offer useful insights into teams and can contribute to issues such as team composition, which is the characteristics that individuals bring to the team, and affect (emotion) in teams which is increasingly recognised as a factor that shapes group processes and outcomes (Barsade & Knight, 2015). There is also the emerging notion of team engagement (Costa et al., 2014) building on the work engagement literature, where attachment theory may provide insights into the degree of engagement with the team as it may be that different attachment styles result in differing degrees of team engagement, for example avoidant individuals could be less engaged than anxious or securely attached employees with the team.

Overall, three key areas that are relevant to the current research: the nature of teams; team composition; and team effectiveness, have been seen as useful from which to explore individual difference approaches (Kozlowski & Bell, 2013) and to set the context and value of the research. This facilitates providing a summary of the area and to highlight the key research issues in teams that still need to be addressed, and how attachment may contribute. These areas will be used to review the team literature, highlight key gaps in this literature and discuss issues suitable for future research where attachment may play a useful role. The contested issue of the nature of team versus groups needs to be considered first as this sets out the context of the current research and its justification.

2.6.1 Nature of Teams

In the area of team research, an element to be discussed is the definition of teams and how they may or may not differ from groups. For some researchers, the latter is an important distinguishing issue and a research area in itself (Kozlowski & Bell, 2013; Kraiger & Wenzel,

1997), with others arguing that there are no differences (e.g., Levine & Moreland, 2002), rather that teams are merely a subset of groups and the two terms can be used interchangeably. However, while many textbooks on groups, such as Forsyth (2014), see teams as groups, they do not consider all groups as teams and they note that the features that distinguish teams from small groups include: multiple sources of information, task interdependencies, coordination among members, common and valued goals, specialised member roles and responsibilities, task-relevant knowledge, intensive communication and adaptive strategies to help respond to change (Dyer, 1984; Forsyth, 2014; Modrick, 1986; Morgan, Glickman, Woodard, Blaiwes, & Salas, 1986; Salas & Cannon-Bowers, 1997).

There are differences between teams and groups, and it is useful to understand what those differences are as they have implications for their study and in the management of teams (Katzenbach & Smith, 1993; Forsyth, 2014). A distinguishing feature of a team is that a team's strength or focus depends on the commonality of its members' purpose, and how the people in the team are connected to one another (Forsyth, 2014) and these differences are even more pronounced when taking this a step further and looking at the difference between a work group and work team (Katzenbach & Smith, 1993; Forsyth, 2014). Groups are different from teams in that teams consist of two or more people who interact interdependently toward a common goal, have joint and integrative accountability, processes, and reward structures in accomplishing tasks (e.g., Katzenbach & Smith, 1993; Salas et al., 1992). A further useful definition of teams is that from Kozlowski & Bell (2003, p334) who define teams as: "Collectives who exist to perform organizationally relevant tasks, share one or more common goals, interact socially, exhibit task interdependencies, maintain and manage boundaries, and are embedded in an organisational context that sets boundaries, constrains the team, and influences exchanges with other units in the broader entity".

The context of teams or groups is seen to have an important impact on behaviour (e.g., Kozlowski & Bell, 2003), for example the work context has some similarities to other team or groups contexts, however, there are differences as well which makes for an environment in which there will be possible differing responses and expectations from individuals. The work context has been identified as an area for future team research work especially as many studies use non-working participants in their samples (Bedwell et al., 2012), examples of which are explored below. The identified gap in this area of teams and specifically the application of attachment theory to teams is for research in actual team working settings, and not research that uses only samples of trainees or students or is based in laboratory contexts (Lavy, Littman-Ovadia, & Bereli, 2014). The two key issues of team composition and effectiveness in the work team context are explored next to further develop these team themes, as they are key issue for team performance and it is suggested they link with attachment theory and therefore a useful link to teams and attachment.

2.6.2 Team Effectiveness and Processes

The core concern of team research could be seen to be around team effectiveness, which is ultimately performance, however, team effectiveness has many varied definitions and there is no single and universally accepted model (Divine, 2002). The issue of performance is crucial in organisational psychology yet confused (e.g. Banks et al., 2014) and indeed, a meta-analytic review gave over 20 different variables to define group effectiveness (Sundstrom et al. 2000). A definition is given by Hackman (2002) who sees team effectiveness as measured by providing products or services that exceed customer expectations, growing team capabilities over time, and satisfying team member needs; Sundstrom, De Meuse and Futrell (1990) define effectiveness as including at least one of three factors: output of the group; the effect of the process of producing the output; the effect

that the process of producing the output has on the capability of the team to work together effectively in the future. However, many approaches see performance and satisfaction as the two major measures (Furst, Blackburn, & Rosen, 1999; Hackman, 1987; Lin, Standing, & Liu, 2008), therefore the focus in this research will be performance and satisfaction, and specific team factors in relation to these issues are reviewed below.

There is a wide range of factors that may influence team effectiveness and it includes: team cohesiveness, team coordination and communication (Lin et al., 2008); leadership and conflict resolution (Chapman, Meuter, Toy, & Wright, 2010); diversity in the various personalities found in the team (Furst et al., 1999); team member expertise (Hackman, 1987); team mental models (Guchai et al., 2014); personality and group interaction styles (De Dreu, 2003; LePine, Crawford, Methot, & Buckman, 2011); and the quality of the team experiences such as Team Member Exchange (Hirschfeld, Jordan, Field, Giles, & Armenakis, 2006). In this section, personality, mental models, Team Identification and quality of team relationships (TMX) are explored below as are not fully researched and they link to the attachment style research question, and provide a useful insight into team processes that include many of the issues above. One central theme is the research between makeup of the team member's personality and team effectiveness, already noted nearly fifty years ago (Heslin, 1964) and yet is still an area that would benefit from further exploration (LePine et al., 2011). Research into team composition and effectiveness has shown a number of different member attributes (e.g. age, gender, functional expertise and abilities), and personality traits are thought to be especially important (Driskell, Hogan, & Salas, 1987; Driskell, Driskell, & Salas, 2014; LePine, Hanson, Borman, & Motowidlo, 2000; LePine et al., 2011; Mount, Barrick, & Stewart, 1998). Personality-related issues have been a central aspect of this and attachment theory may bring in a complementary yet novel application in to the area. A wide range of personality variables has been considered as influencing team effectiveness and in predicting

team-level performance criteria such as team processes and performance (e.g., Barrick et al., 1998; LePine, Hollenbeck, Ilgen, & Hedlund, 1997; Tziner & Eden, 1985). However, further work is seen to still be needed on this issue and the issue of team composition a major theme in the area (e.g. Bell, 2007; Kozlowski and Bell, 2013; Gardner & Quigley, 2014; Stewart, 2003; 2006). Attachment styles potentially contribute to these issues with the suggestion of differing attachment style that may exist in a team, and bring a stronger relationship oriented theory that possibly links more directly with team outcomes than the broader personality based approach to understand team effectiveness issues.

2.6.3 Team Composition

Team composition is the configuration of member attributes in a team (Levine & Moreland, 2002) and is thought to have a powerful influence on team processes and outcomes (Bell, 2007; Kozlowski & Bell, 2003). There has been extensive research around the idea of team composition which debates the nature of the team make up. For example, Cooke et al. (2003) indexed members' position-specific knowledge and found that they collectively related positively to team performance: in a study with undergraduate students, and in a sample of undergraduate business majors who completed tasks both alone and as members of teams, it was found that individual's competencies were also a positive influence on team performance (Offermann, Bailey, Vasilopoulos, Seal, and Sass, 2004), and in a study of men's basketball teams, an individual's talent or ability impacted on team performance (Harris, McMahan & Wright, 2012; Tziner and Eden, 1985). Various meta-analyses have obliquely accepted the idea that teams composed of members with beneficial traits are likely to outperform others with less talented members (Belbin, 2013; Kozlowski & Bell, 2013). However, the varying contexts and samples of these studies and others has been seen to be a factor limiting the generalisability of the research into teams (Cooke and Hilton, 2015).

Attachment brings an alternative yet related view with the insight that different attachment styles bring different perceptions of the role of teams, and the focus on different traits and factors may not give a model to use to understand the role of the individual in teams. Team composition has many threads of research including issues such as: what individual factors are relevant to team performance, what constitutes a good team member, what is the best configuration of team member knowledge, skills, and attitudes (KSAs) and what role differing personality traits play in team effectiveness (e.g., Cannon-Bowers & Bowers, & Procci, 2010; Humphrey, Morgeson, & Mannor, 2009; Stevens & Campion, 1994). The research in this area has many different foci, however, the core is around characteristics of individual team members and the issues such as the impact of these attributes on processes, emergent states, and ultimately outcomes for the team composition (Heslin, 1964; Mann, 1959), however, there are still calls for further work in the area (LePine et al., 2011). Team research has indicated that team processes and effectiveness are affected by aspects of team composition such as a member's skill, job and organisational experiences, personality and group heterogeneity as a whole (Mathieu et al., 2008). This necessitates an understanding of individual factors relevant to team performance: what constitutes a good team member and what the best configuration of team members may be; much of this research has shown that teams whose members have a strong team orientation, or a propensity for working with others in team settings (e.g., Salas et al., 2005), are more likely to be successful and attachment brings a broader and potentially useful insight than the personality trait view, for instance, avoidance attachment individuals may not prefer to be part of a team. Personality-related variables are seen as a useful construct for team effectiveness and widely used in research and practice (Kozlowski & Bell, 2003; 2013) and the key personality-related models that have tended to be used in the research and practice in this area is still the Five Factor Model (LePine, Kichuk, & Wiesner, 1997; LePine et al,

2011), Belbin team roles (Batenburg & Van Walbeek, 2013; Belbin, 2012; Dawson, Lord, & Pheiffer, 1995), and the Myers-Briggs Type Indicator (MBTI; Farhangian, Purvis, Purvis, & Savarimuthu, 2014; Montequín, Fernandez, Balsera, & Nieto, 2013), however, there are limited findings that can be generalised (Kozlowski & Bell, 2003). This is shown that when considering the Five Factor model, for example, a key meta-analysis (Bell, 2007) showed only small effect sizes for this Five Factor model and a lack of large relationship between variance on personality characteristics and effectiveness, with analysis reporting coefficients for the effects of team personality composition with performance ranging from $\rho = .11$ for conscientiousness, $\rho = .12$ for agreeableness, $\rho = .09$ for extraversion, $\rho = .05$ for openness to experience and $\rho = .04$ for emotional stability (Bell, 2007). It was also found that the setting of the study was a significant factor with those in field settings reporting larger effect sizes and lower relationships in the laboratory settings, with the field based effect size $\rho = .30$ for conscientiousness, $\rho = .32$ for agreeableness, $\rho = .15$ for extraversion, $\rho = .20$ for openness to experience and $\rho = .06$ for emotional stability, with minimal scores for the studies set in a laboratory setting.

Recent work tends to confirm this trend, as in a related study with MBA students, a sample of 54, and average age of 28 (Humphrey, Hollenbeck, Meyer, & Ilgen, 2011), found that there was no direct relationship with personality, extraversion and conscientiousness, and performance. However, there was evidence that the configuration of personality within a team has an impact on performance. There were limitations to the study such as the sample size and the use of a student sample, and they did not directly assess any more complicated models such as those with possible mediators. However, these studies are important as they highlight that a simple consideration of personality is not sufficient and more complex models and pathways are needed such as suggested in the current research. The importance of these inconsistencies, after years of research in the area, highlight the need for more work-

based research, and for complementary or different approaches, and the attachment view of a relationship based perspective on teams may be useful in this endeavour. This lack of clarity in the area is confirmed by a further meta-analytic study (Prewett, Walvoord, Stilson, Rossi & Brannick, 2009), which refined the work of Bell (2007), and also examined the Five Factor model, excluding openness, and its relationship with performance. It was found that the correlations between team personality and behaviours were larger than team personality and outcomes, and called for explicit models of team process to look at the composition of team members in relation to one another. Overall, they found similar results to Bell (2007), with weak relationships between the personality composition of teams (using Five Factor model) and team performance, with correlations of $r=.13$ for conscientiousness, $r=.09$ for extraversion, $r=.10$ for agreeableness and $r=.08$ for emotional stability. Again, they found that studies in the field rather than laboratory settings had stronger relationships. The key conclusion made from the review was that the effects of team member personality and team composition are stronger with behavioural criteria and team processes than they are with results-oriented criteria (Prewett et al. 2009), which attachment styles may provide. The TMX and Team Identification factors then are closer to the individual factors.

Attachment styles may add to or develop the issue that the general pattern of relationships in team research supports the idea that results-oriented criteria are more distal to team member personality and that perhaps linked individual behaviour and team processes may explain how and why the personalities of team members influence team performance more accurately. This is possibly also better explored via a more complex set of pathways, such as mediation models. Research is then needed to test relationships with mediational models or related multivariate models, rather than specifying models whereby a broad index of team process is positioned as a mediator of a group of team personality composition variables and a broad measure of team performance, a more precise approach would involve

the specification of models that involve theoretically supported relationships among specific personality characteristics, mediators, and outcomes that are related. As previously noted, there has been a focus on the Five Factor dimensions, and alternatives to these are needed (LePine, 2003; Morgeson, Reider & Campion, 2005) because of the rather limited and very general nature of trait approaches. Attachment with its relational focus may offer an original and also complementary perspective to team research and practice as it is specifically about the nature of relationships and the role an individual may play in social contexts (Rom, 2008).

Overall, it is noted by researchers that despite its importance in teams, issues such as team composition has still not received adequate research and that the research that has been done has not yet led to any systematic conclusions (LePine et al., 2011; Mathieu et al., 2013; Moreland, Hogg, & Hains, 1994) and this is in spite of the numerous recent meta-analyses and reviews detailing certain aspects of team composition, such as teams' personality mixes (e.g., Peeters, Van Tuijl, Rutte, & Reyman, 2006), demographic diversity (e.g., Bell, Villado, Lukasik, Belau, & Briggs, 2010), average cognitive ability (e.g., Devine & Philips, 2001) and attributes of core versus peripheral members (e.g., Humphrey et al., 2011). There are still pertinent issues to consider such as how to best understand and index team composition, and how to model its influences (Ilgen, 1999; Ilgen et al., 2005; Kozlowski & Bell, 2003). Attachment with its use of differing styles may offer some additional insights into these issues. These studies also suggest that the effects of personality may depend on the type of criteria used as dependent variables and that the influence of personality may be through its effects on team-level processes, i.e., a mediated relationship and little research has assessed this mediated relationship or pathway approach (e.g. LePine et al., 2011). Therefore, work is needed on various performance outcomes and a more complex mediated or pathway model to explore this issue (Paetzold, 2015).

2.6.4 Team Cognition and Mental Models

Team cognition is largely about shared mental representations of a team's work and processes and the key concept of team mental models or so called schema. This is a result of the interactions among the team members (Rom, 2008). This area of cognition in teams is a key theme in the research on team effectiveness (e.g., Cohen & Bailey, 1997; Hollenbeck, Colquitt, Ilgen, Lepine, & Hedlund, 1998; Edmondson, 1999; Guchait, Hamilton & Hua, 2014; Simons, Pelled, & Smith, 1999). Mental models are based on the premise that people organise information into patterns that reflect existing relationships between concepts and the features that define them (Johnson-Laird, 1983). Mental models have been defined as a "mechanism whereby humans generate descriptions of system, purpose and form, explanations of system functioning and observed system states, and predictions of future system states" (Rouse & Morris, 1986, p. 360). This mental map concept has been developed into the team effectiveness research and team mental models are defined as "team members' shared, organized understanding and mental representation of knowledge about key elements of the team's relevant environment" (Mohammed & Dumville, 2001, p. 90).

Team related mental models are seen as enhancing team members' coordination and effectiveness in performing tasks that are complex, unpredictable, urgent, and/or novel (Marks, Zaccaro, & Mathieu, 2000) and team members who share similar mental models can, theorists suggest, anticipate each other's responses and coordinate effectively when time is of the essence and opportunities for overt communication and debate are limited (Mathieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000). Therefore, there are beneficial effects of team mental models for the team tasks, and issues such as team training and performance (e.g., Mohammed & Dumville, 2001; Mathieu, Heffner, Goodwin, Cannon-Bowers, & Salas, 2005; Rentsch & Klimoski, 2001; Stout, Cannon-Bowers, Salas, & Milanovich, 1999; Smith-

Jentsch, Mathieu, & Kraiger, 2005; Webber, Chen, Payne, Marsh, & Zaccaro, 2000). Some of the issues that still need to be addressed include whether the positive effects of team mental models depend on the accuracy of the mental models, as Rentsch and Hall (1994) argue that only shared and accurate team mental models enhance team performance.

However, the studies of team mental model accuracy are limited and they have tended to be contradictory (Marks et al., 2000; Mathieu et al., 2005; Rentsch & Klimoski, 2001; Webber et al., 2000). There is also research needed around the relationships between team mental models and team constructs and measures: team demographic diversity, team affective diversity, team leadership, team psychological safety, team conflict, transactive memory, team cognitive resources, and more (e.g., Edmondson, 1999; Jehn, Northcraft, & Neale, 1999; Barsade, Ward, Turnver, & Sonnenfeld, 2000). However, a central theme is around the antecedents of team mental model similarity and accuracy (Fisher, Matthews, & Gibbons, 2016; Marks et al., 2000; Mortensen, 2000; 2014) and the need for work around the antecedents is well-stated (DeChurch & Mesmer-Magnus, 2010; Lim & Klein, 2006; Marks et al., 2000; Mohammed et al., 2010; Pearsall, Ellis, & Bell, 2010). The antecedents would be areas such as team process of planning (Stout et al., 1999), transition phase processes (Marks et al., 2001), early role identification behaviours (Pearsall et al., 2010), participative post-performance debriefings (Smith-Jentsch, Cannon-Bowers, Tannenbaum, & Salas, 2008), or more generic indicators of quality interaction, such as TMX (Dierdorff, Bell, & Belohlav, 2011; Seers, 1989), Team Identification (Crisp et al., 2009) and the issue of personality (Kozlowski & Bell, 2013; 2003).

The role of personality as a potential antecedent on team mental models research has focused on the Five Factor model of personality (e.g., Barrick et al., 1998; Bell, 2007; Driskell et al., 2006; Matzler, Renzl, Muller, Herting & Mooradian, 2008; Mount et al., 1998). Given the conflicting findings from personality, research has started to explore the

role of attachment in team related mental models or schema (e.g., Rom, 2003). This is an area for research that the research question seeks to investigate. How does attachment style influence the perception of an individual's view of their team? Furthermore, we can also specifically see the role of attachment styles in teams as they can be conceptualised as a mental map or schema that may affect teams in terms of the individual's perception of the team. Personality related variables are also seen to be a potential influence on another key variable in team effectiveness, that of team cognitions and specifically team mental models, and that attachment style may impact on this (Rom, 2008).

There is also a need for work around personality related variables and social exchanges in teams, and concepts such as TMX, with a focus on creating and developing effective teams within organisations (Dierdorff et al., 2011) and little research has explored the mediating role of a dysfunctional team process between team mental model similarity and effectiveness (Santos & Passos, 2013), and there is also the issue of whether or not it is important that team members share similar mental models of team interaction processes and what influences this (Ashwoth, Rogers, Pratt, & Pradies, 2014; Lim & Klein, 2006). An emerging theme from the above literature is that research should turn its attention to the specific relationship-oriented exchanges that exist in teams (Tse & Dasborough, 2008). One key construct that has already been noted above and in the literature is that of TMX which is reviewed as an example of this area of work and a useful team exchange and process model.

2.6.5 Team Member Exchange (TMX)

TMX is concerned with the quality of the horizontal relationships between a single member and their peer group, ignoring other dyad interactions between team members (Seers, 1989). Team Member Exchange, is seen as a parallel to Leader Member Exchange (LMX; e.g., Cogliser et al., 2013; Seers, 1989), however, the focus of TMX is on the effectiveness of

working relationships between a team member and peers (e.g., Banks et al., 2014; Seers, 1989) and is different from LMX in that the focal relationship involves the entire team (i.e., peer group) and how individuals view themselves as a team member. It is an “individual member’s perception of his or her exchange relationship with the peer group as a whole” (Seers, 1989, p. 119) and represents willingness to “assist other members, to share ideas and feedback, and in turn, how readily information, help, and recognition are received from other members” (Seers, 1989, p. 119). These are social exchanges and are essential because they make up the process of communication between team members, and high-quality TMX means that team members have excellent social and task relationships and they work to benefit co-workers and the organisation, and less conflict (e.g. Seers, 1989). Given the importance of the quality of TMX relationships for team effectiveness, it is proposed that it is critical to understand individual team members’ perceptions and experiences of their exchange relationships with other team members, to which attachment is a potentially useful framework.

The research into TMX has focused both on its antecedents and outcomes, at the individual as well as at group level and at the individual level, it has been found to be predictive of important work outcomes such as employee job satisfaction, organisational commitment, and job performance (Banks et al., 2014; Hirschfeld et al., 2006; Kamdar & Van Dyne, 2007, Liden et al., 2000). For example, a meta-analysis of TMX found an association between TMX and individual job performance, of .25, correlations with job satisfaction of .43 and .45 with organizational commitment, and with turnover intentions -.16 (Banks et al., 2014). Antecedents of individual TMX relationship include issues such as the interactional justice perceptions of individuals (Murphy, Wayne, Liden, & Erdogan, 2003), however, the area of TMX would currently benefit from more research into the antecedents of TMX (e.g. Banks et al., 2014; Murphy, Wayne, Liden, & Erdogan, 2003). In terms of

individual outcomes, it has been found that employees experience higher job satisfaction if they perceive high TMX to be present (Major et al., 1995) and the ‘relationship quality’ of team member exchange has furthermore been shown to vary in terms of content and intensity and, over time, individuals who experience low TMX relationships with co-workers often limit their interactions to task completion, with those experiencing high TMX establish mutual and reciprocal trust (Liden et al., 2000), and go beyond mere reciprocity exchange when executing team tasks. This is seen to aid eventual development of an organisation’s social capital (Baker & Dutton, 2007). Other important outcomes are also associated with TMX in relation to areas such as team cohesiveness, performance, efficiency and organisational climate (Banks et al., 2014; Ford & Seers, 2006; Eby & Dobbins, 1997).

Social interaction and cues support the dynamics of team exchange relationships, and these norms of reciprocity are linked to organisational commitment (Love & Forret, 2008). This, in turn, has a value which is perhaps more socio-emotional in nature than economic but is significant as it determines an organisation’s social capital, and is reliant on mutual trust and respect (Baker & Dutton, 2007). Having knowledge of the attachment influence on understanding TMX can be useful for team development as it gives insight into the antecedents of TMX and the current research question investigates the influence of attachment on TMX and its role in the attachment – performance relationship. Therefore, with this emerging body of work greater clarity on the antecedents, nature, and characteristics of team members’ exchanges is still needed (Banks et al., 2014; Tse et al., 2008), as well as specifically an examination of personality and emotion related issues (Liao et al., 2013; Tse et al., 2008). A related area for research work is TMX and identification and their outcomes on performance (Farmer, Van Dyne, & Kamdar, 2013) which has been linked to attachment. Further, Team Identification is also a key aspect of the team effectiveness theme and thus reviewed below.

2.6.6 Team Identification

The notion of Team Identification is that a shared social identity underpins a team's performance (Haslam, 2004) and derives from the application of social identity theory in a team setting (Ashforth & Mael, 1989) and discusses how team members consider team goals as their own and feel “psychologically intertwined with the group's fate” (Mael & Ashforth, 1995, p. 310). Team Identification is defined as the part of an individual's self-concept in which they accept and value being part of a team and share norms and behaviour codes which develop into a sense of cohesion and interdependency (Henry, Arrow, & Carini, 1999; Solansky, 2011; Tajfel, 1981; Wheelan, 1994). Extensive research has shown Team Identification to be a powerful process in high levels of organisational performance (Haslam, 2004) and it is positively correlated with workplace outcomes, including team performance (e.g., Lembke & Wilson, 1998), job satisfaction, and employees' organisational citizenship behaviour (Van Dick & Wagner, 2002).

Team Identification is defined as the part of an individual's self-concept in which they acknowledge and value being part of a team and they share norms and behaviour codes which develop into a sense of cohesion and interdependency (Tajfel, 1981; Wheelan, 1994; Henry et al., 1999). Identification is an individual's sense of belonging with a social entity (Ashforth & Mael, 1989) and the development of identification occurs as the team becomes socially tighter (Wheelan, 1994). The outcome produced by a team depends greatly on the strength of the identification, which is loose coupling versus tight coupling, among individuals (Cross, 2000). A challenge for organisations is to create teams with members that identify with each other and who are loyal and cooperative together (Van Der Vegt, Van De Vliert, & Oosterhof, 2003). According to social identity theory, identification is a cognitive construct that denotes an individual's oneness with a team (Ashforth & Mael, 1989). It is argued by

Richter, West, Van Dick and Dawson (2006, p. 1254) that “self-categorization theory provides insights into the cognitive mechanisms underlying these dynamics” of social identity theory in that those who identify with a team have prototypes that direct behaviours, values, and attitudes. Attachment theory may influence identification, for example, avoidant attachment individuals may not seek this closeness (Crisp et al., 2009).

Previous research has documented that intra-group respect fosters individual engagement with work teams or organisations (Ellemers, Sleebos, Stam & Gilder, 2013). They extended this work by empirically distinguishing between perceived inclusion of the self in the team and perceived value of the self for the team as separate psychological consequences of respect. Based on a social identity analysis, it was found that perceived inclusion facilitates the development of a positive team identity, while perceived value elicits the willingness to invest in the team (Merrilees et al., 2014). In other words, the former determines how the individual feels about the team, while the latter influences what the individual is willing to do for the team. It was found that the reports of individual team members with positive team identity and a willingness to invest in the team were correlated with supervisor ratings of the team's action readiness. The study also supports the notion that Team Identification is beneficial to performance. Although not all tasks require the skills of multiple individuals, when people are placed in a collective arrangement that requires them to combine their skills and abilities and integrate their actions, performance gains are realised when there is identification among team members. Where more research is needed is around the potential antecedents from an individual differences perspective (Crisp et al., 2009). Within this approach it is important to note that the term ‘social identification’ is often used with different meanings, for instance, it has been used to refer to the content of the identity itself, as well as to indicate the strength of the association with a particular social category (Ellemers, Spears, & Doosje, 2002). There are different components of social identity and

whilst they are related they may operate relatively independently of each other (Ellemers, Kortekaas & Ouwerkerk, 1999; Jackson, 2002, Smith et al., 1999). The argument made is that attachment may influence this process, which would then impact on performance.

The current research investigates team process issues from an individual differences paradigm, and specifically within attachment styles and its application to the work context. Issues such as team conflict and organisational culture are not directly addressed as they are not the focus of the research question nor are they within the scope of this study. For example, it could be argued that attachment style is influenced by the organisational culture, however, this study is looking at the consequences of attachment style and its influences. This research is developing an existing body of attachment related to the individual perceptions work and extending this work within this model, within team exchange related factors.

2.7 Development of Hypotheses

It has been argued above that attachment working models may encompass two complementary knowledge structures - one referring to the worthiness of the self in relationships to receive support and caregiving from others, called 'model of self', and the other referring to the availability, sensitivity, and responsiveness of others, called 'model of others' (Berscheid & Reis, 1998) and that this may be team oriented or more global or dyadic orientation. The attachment construct can be measured along two continuous orthogonal dimensions, labelled anxiety and avoidance (Brennan et al., 1998), where attachment anxiety reflects an individual's negative model of self and is characterized by an anxious preoccupation with relationships and a fear of rejection, and attachment avoidance reflects an individual's negative model of others and is represented by self-reliance, avoidance of intimacy, and discomfort with interpersonal closeness (Gillath et al., 2016; Mikulincer &

Shaver, 2016). This thesis seeks to examine the relationship between individual (global) attachment style and team attachment style to investigate to what extent are they related. It is further proposed that attachment-style differences will be reflected in the goals people seek during team interactions. For those with high relationship attachment anxiety, they will seek to be accepted and respected by team members and may perceive team interactions as an opportunity for gaining a sense of attachment security. This is important as specific mental models such as team attachment may be more strongly associated with relationship-specific outcomes such as feelings of identification with the team and the experiences of the team relationship such as TMX than would global attachment (mental) models. However, those who score high on relationship attachment avoidance seek to maintain distance from team and team members and to accentuate their independence and autonomy during team interactions (e.g. Smith et al., 1999). Therefore, the current research suggests the following hypotheses:

Hypothesis 1a: There is a positive relationship between the individual anxious attachment style and the anxious team attachment style.

Hypothesis 1b: There is a positive relationship between the individual avoidant attachment style and the team attachment style

The relationship between attachment and performance at work has been shown to be of importance to those who lead, manage, and otherwise invest in all organisations. Given the contested views on the links between attachment and performance (Harms, 2011; Neustadt et al., 2011; Simmons et al., 2009) the current research holds measures of job performance to be dependent variables and proposes insecure attachment styles to be independent variables which will be associated with lower levels of performance. In line with the argument developed above, a mediation relationship is proposed with TMX and Team Identification as the mediators, and attachment styles as the independent variables.

However, in the first instance the direct relationships are explored, followed by the mediational hypotheses. The following hypotheses are therefore firstly suggested:

Hypothesis 2: Lower levels of self-reported job performance will be associated with:

- a. Individual anxious attachment
- b. Individual avoidant attachment
- c. Team anxious attachment
- d. Team avoidant attachment

Hypothesis 3 Lower levels of self-reported team performance will be associated with:

- a. Individual anxious attachment
- b. Individual avoidance attachment
- c. Team anxious attachment
- d. Team avoidant attachment

This current research adds to previous research by exploring the direct contribution of an employee's attachment insecurities to their job satisfaction and satisfaction with the TMX.

It is therefore initially proposed that:

Hypothesis 4: Lower levels of job satisfaction will be associated with:

- a. Anxious attachment
- b. Avoidant attachment
- c. Team anxious attachment
- d. Team avoidant attachment

There been some work that has shown the influence of attachment on OCB (e.g., Mikulincer & Shaver, 2007a). However, it is still a contested area and not all direct and indirect links have been tested (e.g., Desivilya, Sabag, Ashton, 2006; Geller & Bamberger, 2009; Little, Nelson, Wallace, & Johnson, 2011; Richards & Schat, 2011; Schusterschitz, Stummer, & Geser, 2014). In addition, it is proposed that there is a direct and indirect relationship between attachment styles and OCB as the cognitive and regulatory processes

used in secure and insecure attachment influence the recall of information and views of others (Mikulincer & Shaver, 2007d). Positive views which are inherent in secure attachment and negative views of others which are characteristic in avoidant and anxious attachment, may affect an individual's perception of the social exchange relationship with the organisation and those that work there (Bateman & Organ, 1983; Cropanzano & Mitchell, 2005). Secure individuals easily recall positive interactions from the past, which shape a positive view of the organisation and of others (Mikulincer, Gillath, & Shaver, 2002). Individuals with an avoidant style are more suspicious of others' intentions and are more likely to project negative self-traits onto others, resulting in negative views of others and the organisation. Avoidant attachment orientation with negative views of others, lack of altruism and prosocial values may affect OCB (Mikulincer & Shaver, 2007a). Anxious attachment is characterized by an anxiety motivation that exaggerates threat-appraisals; despite the anxious individual's positive view of others and negative view of self, their exaggerated anxiety that others are not available in times of need drives anxious individuals to have a negative view of the exchange relationship (Mikulincer et al., 2002; Pereg, 2001). Anxious attachment and avoidant attachment may therefore influence individuals to reciprocate negatively, decreasing OCB and performance, whereas secure attachment increases OCB and performance in others. This current research therefore uses OCB as an indicator of performance as it has been shown to be an effective measure of organisational performance that is linked to attachment styles and therefore it is suggested that attachment styles will be associated with lower levels of reported OCB. It is therefore proposed that:

Hypothesis 5: Lower levels of reported OCB will be associated with:

- a. Anxious attachment
- b. Avoidant attachment
- c. Team anxious attachment
- d. Team avoidance attachment

It was argued by Mikulincer and Shaver (2007a) that more work be done on the links between social exchange based theories such as LMX, OCB and related issues. Attachment theory in line with this has been used in LMX (e.g., Popper & Mayseless, 2013), and related areas such as authentic leadership (Hinojosa, Davis McCauley, Randolph-Seng, & Gardner, 2014). Need for further work in the area of TMX has also been noted (Banks et al., 2014) and therefore, this current research has a new contribution which adds to and develops a relationship-based approach to teams using the concept of TMX and Team Identification. It has been shown that attachment anxiety and avoidance in close relationships are related with negative team-related cognitions and emotions. Anxiety is also seen to be related to the pursuit of closeness goals and impaired instrumental performance in group tasks. Avoidance was related to the pursuit of distance goals and deficits in socio-emotional and instrumental performance relationships with a group as a whole or other individual group members (Markin & Marmarosh, 2010; Mikulincer & Shaver, 2007a; Rom & Mikulincer, 2003; Smith et al., 1999). Attachment anxiety and avoidance have been associated with discrepancies in self-other perceptions (Chen & Mallinckrodt, 2002; Markin & Marmarosh, 2010). So, work in the area strongly supports the application of attachment theory and research to the field of group relationships, and therefore extending this to teams with the suggestion that variations along attachment dimensions of anxiety and avoidance potentially lie beneath a person's attitudes toward teams.

In teams, it is suggested that an anxious attachment individual's hyper activating strategies leads them to be more focused on maintaining the positive emotional tone of group

interactions than on contributing to the task completion. As anxious people strive to be accepted and respected, they desire to feel close to others and direct psychological resources mainly to the promotion of an atmosphere of acceptance and support among team members and the resolution of any intragroup conflict that could harm this atmosphere. Therefore, the hyper activating strategies draw resources away from task-oriented thoughts and behaviours, thereby impairing instrumental functioning. On the other hand, avoidant persons' deactivating strategies foster an ignoring of the socio-emotional domain of group interactions and lead avoidant persons to devote time and energy to the accomplishment of group tasks that do not require any emotional involvement with the group (Mikulincer & Shaver, 2016). This sees their deactivating strategies principally impairing the socio-emotional functioning of the team and it is proposed that these relationships will hold for team attachment and so this leads to the following hypotheses:

Hypothesis 6: Lower levels of TMX will be associated with:

- a. Anxious attachment
- b. Avoidant attachment
- c. Team anxious attachment
- d. Team avoidant attachment

This current research also explores the relationship between interpersonal attachment style and identification with groups and builds on Crisp et al. (2009) who hypothesised that following threat to an interpersonal relationship, higher attachment anxiety would be associated with lowered tendencies to identify with groups. In various contexts it has also been shown that attachment relationships may be mediated by social identification (Rosenthal, Somers, Fleming, & Walsh, 2014) and in this work there was a difference between the two types of attachment with the mediational analysis suggesting that group identification partially mediated the effect of attachment avoidance on the outcome variable but did not mediate the effect of attachment anxiety. To test this in a differing context, in this

current research, Team Identification and attachment are examined as key variables. These issues are important as it is seen that effective teamwork produces more when identification is present (Ellemers et al., 2013). From this therefore the following is suggested:

Hypothesis 7: Team Identification will be negatively related to:

- a. Anxious attachment
- b. Avoidant attachment
- c. Team anxious attachment
- d. Team avoidant attachment

2.7.1 Mediators of Attachment Styles

In addition to the above hypotheses, the research question explores the pathways between the research variables. This pathway or mediational view allows for a more realistic and complex representation of factors affecting relationships in organisations and meets the specifically stated need for such mediation studies in attachment (e.g. Paetzold, 2015). Various studies have already identified several mediators of the relationship between attachment and organisational variables, such as group cohesion (c.f., Mikulincer & Shaver, 2016) and general wellbeing variables such as dysfunctional attitudes and low self-esteem (Roberts, Gotlib, & Kassel, 1996), ineffective coping (Lopez, Mauricio, Gormley, Simko & Berger, 2001; Wei, Heppner, & Mallinckrodt, 2003), self-splitting and self-concealment (Lopez, Mitchell, & Gormley, 2002), maladaptive perfectionism (Wei, Russell, Mallinckrodt, & Zakalik 2004), social competencies and emotional awareness (Mallinckrodt & Wei, 2005), and emotional reactivity and emotional detachment (Wei, Mallinckrodt, Larson, & Zakalik, 2005). The non-organisational-based studies have taken a pathology-based approach by exploring maladaptive strategies (e.g., maladaptive perfectionism) as mediators between attachment and distress. Given that the focus of this work has been with dysfunctional problems, more work is needed in a non-clinical setting to test and develop this further.

This research has therefore argued that attachment is linked to both TMX and Team Identification, as these are both relationship-based and -oriented concepts and that an individual attachment style will influence these two processes. Therefore, it is proposed that there is a mediating role for TMX and Team Identification in the proposed model. While attachment styles have been shown to be, and it is suggested in this research that attachment will have an influence on OCB, TMX, Team Identification and performance, understanding both direct and indirect effects may be more useful and realistic. Therefore, as theorised above, it is suggested that in the team context both TMX and Team and the following hypotheses are then suggested:

Hypothesis 8: Team Identification and TMX will mediate the relationship between individual and, team anxious and avoidant styles and:

- a. OCB
- b. Job satisfaction
- c. Self-rated performance
- d. Team performance

2.8 Summary

It has been argued that the use and application of adult attachment styles, with its concept of internal working models brings a novel and different approach to understand the perceptions of those working in teams. The current research seeks to explore the identified gaps by the exploring the relationship between global and team attachment, the application of attachment into a workplace setting, and the use of the team attachment instrument and the relationship with attachment and teams.

Attachment is explored with both global and team attachment in relation to teams and the outcomes of these to determine the antecedents of the performance related outcomes. Whilst it is apparent that the research into teams is extensive, gaps are still evident in the

work that has been undertaken in this area so far, the contribution from the attachment perspective contributes to the both the further development and understanding of attachment in the workplace and specifically in team work, and also meets some of the gaps in the team literature by suggesting variables that may be more useful in understanding the dynamic of teams. Furthermore, the role of individual differences approaches such as personality can be complemented and developed by the attachment perspective. Attachment theory relates well to the study of teams as it has a strong relational aspect. Teams are seen to be productive when the team is effective and the nature and quality of the individual input into the team is seen as a key determinant of effectiveness. For example, different personality types may bring a variety of styles and this diversity of personality may result in more effective teams as different ideas may be generated and different task undertaken. This is the area of team composition which attracted a large volume of research and further work is called for (e.g., Kozlowski & Bell, 2013). One identified need was usefulness of moving from models such as the Five Factor personality model that has dominated the area to the potential contribution of attachment styles as an alternative.

The application of attachment to work teams is needed as most attachment work in the area of groups has not been conducted in the workplace which raises issues of generalisability and the need for studies using real teams working in real organisations. This context may affect the outcome and valid work context which may have different constraints and tensions compared to an artificial or short-term team. Attachment styles offers a new and different perspective into teams, and one that is interactional and dynamic in nature. Teams also need to be cohesive and related to this is the degree of identification with the team which has been linked to performance. The quality of the team interactions such as TMX, have been linked to performance, and attachment styles and their notion of a working model, are linked to the notion of scheme or mental maps that may guide the individual in their team interactions.

Attachment is adding to this body of teamwork research and issues such as what is the mechanism whereby these individual level variables influence team effectiveness and how individuals' mental representations are affected by individual differences explored. Therefore, the use of an attachment style approach gives a more detailed understanding of pathways on team processes such as TMX and Team Identification. The use of attachment theory adds value as an emerging and a useful framework for organisational psychology research and practice (e.g., Harms, 2011; Mikulincer & Shaver, 2016; Richards & Schat, 2011), and specifically teams (Rom, 2008) and brings together various research threads for both team and attachment areas.

3. Methodology

The methodology around the measurement of attachment styles is discussed, and the positivist approach taken in this research explained and justified. The participants and sampling design are discussed, followed by the specific measures used and procedure followed. The data collection phases for this study, and the data analysis, are then explained and justified in line with the research questions. A cross sectional, correlational survey design was used applying established scales with good reliability and validity. The purpose was to develop a mediation model to explore the role and association of an individual's dyadic attachment style and their team attachment style on the individual's experience of working in a work team, how they engage with this work team and the subsequent influence of this on performance. First, the specific hypotheses to be tested are summarised.

3.1 Research Questions

The research question is: What is the role and influence of an individual's dyadic (or global attachment style) and their specific team attachment style on the individual's experience of their work team, and the subsequent influence on performance related outcomes?

Research question one: To explore whether individual level attachment styles are related to team level attachment.

Hypothesis 1a: There is a positive relationship between the individual anxious attachment style and the anxious team attachment style.

Hypothesis 1b: There is a positive relationship between the individual avoidant attachment style and the team attachment style

Research question two: What is the role of individual and team attachment style on perceptions of individual and performance?

Hypothesis 2: Lower levels of self-reported job performance will be associated with:

- a. Individual anxious attachment
- b. Individual avoidant attachment
- c. Team anxious attachment
- d. Team avoidant attachment

Hypothesis 3 Lower levels of self-reported team performance will be associated with:

- a. Individual anxious attachment
- b. Individual avoidance attachment
- c. Team anxious attachment
- d. Team avoidant attachment

Hypothesis 4 : Lower levels of job satisfaction will be associated with:

- a. Anxious attachment
- b. Avoidant attachment
- c. Team anxious attachment
- d. Team avoidant attachment satisfaction

Hypothesis 5: Lower levels of reported Organisational Citizenship Behaviours (OCB) will be associated with:

- a. Anxious attachment
- b. Avoidant attachment
- c. Team anxious attachment
- d. Team avoidance attachment

Research question three What is the role of attachment in team processes?

Hypothesis 6: Lower levels of TMX will be associated with:

- a. Anxious attachment
- b. Avoidant attachment
- c. Team Anxious attachment
- d. Team Avoidant attachment

Hypothesis 7a: Team Identification will be negatively related to:

- a. Anxious attachment
- b. Avoidant attachment
- c. Team Anxious attachment
- d. Team Avoidant attachment

Role of team relationship factors as mediators

Hypothesis 8: Team Identification and TMX will mediate the relationship between individual and team anxious and avoidant styles and:

- a. OCB
- b. Job satisfaction
- c. Self-rated performance
- d. Team performance

3.2 The Methodology of Attachment Styles

This research follows a positivist approach, its scientific method and quantitative approach to research (Breen & Darlston-Jones, 2008) which sees the psychological research process and knowledge as objective, generalisable and value-free, or neutral. The aims of positivism are description, prediction, control, and explanation. The predominant aim is the creation of universal laws (Bryman, 2012; Leahey, 1992). There are two differing approaches in adult attachment research and these differences are seen in the different methodological approaches that they follow (George & West, 2012). There is the developmental/psychodynamic or narrative influenced approach, which can be contrasted

with the social psychologically influenced view and which takes a quantitative approach (George & West, 2012; Mikulincer & Shaver, 2007a). In the attachment paradigm, the measurement of individual differences in attachment was started by Ainsworth, who developed Bowlby's ideas while observing mother-infant dyads. (Ainsworth, 1967; Ainsworth et al., 1978). These behaviours were classified with the Strange Situation assessment procedure mentioned in earlier chapters. From this work developed the secure, anxious and avoidant classification scheme, which became the basis of subsequent attachment interviews and also influenced the self-report measures for adults that were later developed (Hazan & Shaver, 1990).

Therefore, two broad approaches to the assessment of attachment styles have developed and despite having roots in a common theoretical tradition, work and research on adult attachment is conducted in two distinct and differing methodological perspectives. The developmental psychology perspective, is based on the Adult Attachment Interview (AAI), from which an individual's current state of mind regarding childhood experiences with caregivers is inferred from a semi-structured interview (Hesse, 1999; Main, Goldwyn & Hesse, 1998). The second perspective tends to rely on self-reports of attachment-related thoughts and feelings in adult relationships (Cassidy & Shaver, 1999). This perspective could be seen to be within the positivist or nomothetic paradigm, with the developmental approach more within the idiographic or interpretivist view. These approaches to research each have specific assumptions around the nature of the phenomena under study (Bryman, 2012). Positivists generally assume that reality is objectively given and can be described by measurable properties which are independent of the observer (researcher) and his or her instruments an positivist studies generally attempt to test theory, in an attempt to increase the predictive understanding of phenomena.

A useful approach to explore these differences and the resulting implications for research can be explored and explained by classic organisational analysis frameworks such as that of Burrell and Morgan (1979) who define four research paradigms: functionalism; interpretivism; radical structuralism; and radical humanism. Chua (1986) suggests three primary alternatives: Positivism; Interpretivism; and Critical. Another view is that of Luthans and Davis (1982) for whom there are two broad methodological approaches to the study of psychology and in organisations: nomothetic and idiographic. The key differences are that ideographic inquiry focuses on ‘getting inside’ a subject and exploring their detailed background and life history. They involve themselves with people’s normal lives, and look at diaries, biographies, and observation. Nomothetic research adopts the scientific method, and hypothesis testing, with the use of quantitative tests like surveys, personality tests, and standardised research tools (Bryman, 2012; Bryman & Bell, 2011; Robson, 2002). In summary, this research has adopted the nomothetic approach as its research aim is to develop the theory and practice within the current dominant positivist approach to studying adult attachment styles in the workplace.

The current research uses the quantitative approach to adult attachment research and the notion of the measurement of an adult attachment style. There is a difference as the original work of Bowlby, while seeing intimacy related to attachment, was looking at resiliency and risk issues. The quantitative adult attachment style tradition uses attachment concepts to explain concepts such as loneliness, romantic relationships and workplace behaviours. In this quantitative approach Ainsworth’s three category classification system has been initially used. Ainsworth rejected the traditional positivist approach to measuring personality as a method to assess attachment, as she saw this as attempting to place all tested individuals on a continuum with respect to one or more variables. For Ainsworth, attachment is a qualitative and organisational construct not a dimensional one (Ainsworth et al., 1978).

The developmental tradition above can be seen as an interpretivist approach, and focuses on the evaluation of mental representations of attachment using a narrative method. Although the approach does use a categorisation, it does not seek to measure or compare individuals, rather to understand.

However, the later applications of the work of Ainsworth et al. (1978) by others has focused on a hypo-deductive method, a positivist philosophy and using self-report measures to measure and compare an individual's attachment style (e.g., Hazan & Shaver, 1990). This focus is different from the more interpretative developmental approach, as the more objectivist model relies on the individual's conscious self-evaluation. In the developmental narrative approach, the focus is on the 'state of mind' and individuals' organisation of thought. There are advantages to both approaches and each offer useful insights. The contrast is the classification about what an individual thinks or claims to be true about themselves and others (George & West, 2012).

These differences often result in contradictory findings, depending on which approach is used. Indeed, some have questioned whether the two approaches are describing the same construct. This thesis used the self-report measures perspective to build on the existing work in the field. The approach is also more appropriate for organisational settings as it tends to have a non-clinical focus. This quantitative approach followed uses deductive logic to discover unilateral, generalised relationships and to attempt a prediction of patterns of behaviour across situations (Bryman, 2012; Orlikowski & Baroudi, 1991; Robson, 2002). It uses established ways for arriving at research questions which means spotting or constructing gaps in existing theories rather than challenging their assumptions. The rationale for adopting this positivist approach is that this research aims to develop a new and different approach into the study of teams and attachment within the existing attachment theory. The aim of this is

thus not to develop a new approach to the study of attachment, or resolve the tensions between these two traditions.

Within the quantitative approach two broad approaches to the measurement of attachment styles tradition are categorical or typological models, and the notion of attachment dimensions. This has led to the types versus dimensions' debate (Brennan et al., 1998). There are those that have preferred typological models when assessing individual differences in attachment patterns (Ainsworth et al., 1978; Bartholomew & Horowitz, 1991; George, Kaplan, & Main, 1985; Hazan & Shaver, 1987; Sroufe & Waters, 1977). Others have made the case for scores on the dimensions of the internal working models (model of self and model of other) that are latent to their specific pattern/style (Fraley & Waller, 1998; Griffin & Bartholomew, 1994), and an alternative view has attachment theory conceptualised and measured as a two-dimensional model of anxiety and avoidance (e.g., Bartholomew & Horowitz, 1991; Brennan et al., 1998; Griffin & Bartholomew, 1994) and measured on a continuous scale, the two dimensions being anxiety and avoidance. This then has a model of attachment with these two dimensions, avoidance and anxiety, and led to the development of the Experiences in Close Relationships (ECR) scale (Brennan et al. (1998), and suggested that secure attachment be defined as the absence of anxiety and avoidance, which is low anxiety and low avoidance scores on the ECR. These two dimensions of anxiety and avoidance are used in this research and measured as two continuous variables as explained in Chapter 2. This focus on secure attachment as the absence of low scores on anxiety and avoidance may be seen as a potential deficiency in the scale (Mikulincer and Shaver, 1987; 2016).

3.3 The Measuring of Attachment Styles

With the use of an agreed and a proven methodology in this research, there is a greater focus on new developments and application of adult attachment issues, with methodology and epistemology issues playing a secondary role as these have been debated and agreed in previous research. Quantitative measures may also be more appropriate for organisational settings than the AAI. For example, methods such as the AAI are potentially not appropriate for organisational settings given its more intrusive clinical focus and the time the interview takes. The time and nature of the approach would not be accepted in an organisational setting and have ethical issues. The approach and perspective in this current research therefore follows the majority of work in the area and is also within the social and personality psychology paradigm that assumes that attachment styles can be measured using survey self-report methods (e.g., Hazan & Shaver, 1987; 1990).

In the attachment style literature the key scales developed are the Adult Attachment Questionnaire (Mikulincer & Shaver, 2007a), the Adult Attachment Scale (Collins & Read, 1990), the Attachment Style Questionnaire (Feeney, Noller, & Hanrahan, 1994), and the Relationship Questionnaire (Bartholomew & Horowitz, 1991). The original measures of adult attachment based on the work done by Ainsworth et al. (1978), and Hazan and Shaver (1990) developed categorical measures based on Ainsworth's original categories for use with adults. However, this focus on categories was seen to be limited and based on the assumption that attachment variations among people were either not important or did not exist (e.g., Collins & Read, 1990). The Experiences in Close Relationships scale (ECR) was developed by Brennan et al. (1998) and led to an integrated scale by focusing on two higher order factors: anxiety and avoidance. They proposed two 18-item scales, one was intended to assess attachment anxiety and the other was to measure avoidant attachment. The scale was developed via a factor analysis of all 482 items from existing adult attachment self-report scales at the time of

the study and found the two higher order factors of anxiety and avoidance with a sample of 900 university students (Brennan et al., 1999). In Brennan et al.'s (1998) study the avoidance subscale was highly correlated to scales such as Carnelley, Pietromonaco and Jaffe's (1994) Discomfort with Closeness and Discomfort with Disclosure scales. The anxiety subscale was also highly correlated with other scales, such as Brennan and Shaver's (1995) Jealousy and Fear of Abandonment Scale and Feeney et al.'s (1994) Preoccupation scale and indices for internal consistency were .94 and .91 for the avoidance and anxiety scales, respectively (Brennan et al., 1998). This was supported in numerous studies and in a meta-analysis with 313,462 individuals from 564 studies, which provided 1,629 internal consistency reliability estimates and an overall coefficient of .89 and .90 for the Anxiety and Avoidance sub-scales, respectively were reported (Graham & Uterschute, 2015), and other reviews have reported high reliabilities, with alphas around .90 and test- retest coefficients between .50 and .75 (Mikulincer & Shaver, 2016). Good construct and criterion validity has been reported and in varying contexts and cultures (Fraley, et al., 2015; Graham & Uterschute, 2015; Mikulincer & Shaver, 2016) and suggested for use in workplace studies (Richards & Schat, 2011) and was used in this research for the global attachment measure. Given the wide use of the scale there is substantial reliability and validity (e.g. Mikulincer & Shaver, 2016) and an example of the validity is some recent construct validity studies the overall results of which are noted in table 3.1, between the attachment dimensions and the Big Five (Nofle & Shaver, 2006; Richards & Schat, 2011).

Table 3.1 *Attachment dimensions and the Big Five*

	Anxiety	Avoidance
Trait Negative Affectivity	.33**	.18*
Neuroticism	.47**	.24*
Extraversion		-.32**
Agreeableness		-.20*

Note: Nofle & Shaver (2006), Richards & Schat, (2011)

The reliability of the ECR is high, with alpha coefficients consistently around .90, and test retest coefficients range between .50 and .75, and the construct and criterion validity have been demonstrated in numerous studies (Mikulincer & Shaver, 2016), the volume of which is way beyond the scope of this section to review in full.

Team attachment was measured with an adaptation of Smith et al., (1999) group attachment scale which was modelled on the ECR, and good concurrent validity was reported, with the scale demonstrating an expected pattern of correlations correlating with collective self-esteem and self-esteem, good discriminant validity and predictive validity, and scale has been used in subsequent studies in groups (Marmarosh & Markin, 2007; Van Vianen, Feij, Krausz, & Taris, 2003; Meredith et al., 2011). The original group attachment scale research found test–retest reliabilities ranging from .80 to .90 for group attachment anxiety and from .73 to .87 for group attachment avoidance (Smith et al., 1999) and in a more recent study (Keating et al., 2014) for group attachment anxiety the Cronbach’s alpha was .80 and the mean inter item correlation was .29, and for group attachment avoidance the Cronbach’s alpha was .78 with the mean inter item correlation .28.

Measures of personality such as five factor model were not used as it was not related to research questions and attachment styles have consistently shown explanatory power,

above and beyond that of personality traits such as extraversion, neuroticism, agreeableness (Erez, Mikulincer, Van Ijzendoorn, & Kroonenberg, 2008; Nofle & Shaver, 2006; Shaver & Brennan, 1992). Attachment style then has a unique contribution in predicting relational cognition and behaviours (Harms, 2011; Feeney & Collins, 2001; Mikulincer & Shaver, 2003; Mikulincer et al., 2005) and is it the focus of the current research.

Self-report measures have been used for two reasons in this research in line with the adopted paradigm. First, as discussed above, the nature of the measured constructs and the epistemological and methodological position taken in this study. However, the social psychology view is that attachment is a self-referential perception (e.g., Conway & Lance, 2010). The literature in the area has also provided evidence against widespread misconceptions about common method variance in self-reports, and has provided arguments for the use of self-report measures (c.f., Spector, 2006; Brannick, Chan, Conway, Lance & Spector, 2010). The measures used were subjected to a factor analysis, and reliability coefficients. This was conducted to check the scales in order to control for possible measurement error. The original scales displayed validity and reliability as given below, and this was again established in this study. Therefore, no statistical corrections for common method variance have been applied since research has shown that when common method variance is present, statistical corrections do not produce more accurate estimations of relationship than doing nothing (Richardson et al., 2009; Conway & Lance, 2010).

In this current research some variables used single item measures/scales. Single item measures were used to measure job satisfaction, individual and team performance. There are a number of reasons why a single item scale was used for these constructs. Firstly, the research looked at the perception of individuals about their global performance. This is suitable for this type research question. Single item scales have had a long history in the measurement of global constructs (Gardner, Cummings, Dunham, & Pierce, 1998), for

example in work performance (e.g. Judge & Ferris, 1993; Wanous & Hudy, 2001) and job satisfaction (Nagy, 2002; Wanous, Reichers, & Hudy, 1997) and related areas such as overall self-rated health (Idler & Benyamini, 1997). Often single item measures have also been used to for constructs that may consist of several facets or dimensions. As this research question did not seek to differentiate the various facets of performance and job satisfaction single item scales are acceptable and supported by research in the area. They are also useful because of the time it takes, so shorter surveys are possible and when participants are busy such as those in work this is useful (Waltz, Strickland, & Lenz, 1991). Some note that multiple item measures are only academic pedantry (Wanous et al., 1997) and research in the area has continued to show benefits of one item scales for minimizing respondent burden, reducing criterion contamination and increasing face validity with acceptable reliability and validity (Fisher et al., 2016; Wanous & Reichers, 1996). Although many support multiple item measures, one item measures are supported and shown validity and reliability in the studies noted above. Single item measures were used in line with the research questions, to ensure time efficient use of the survey as some scales in the survey were lengthy, and in line with previous research (e.g. Wanous & Reichers, 1996). The scales were all used in previous research with the ECR the core global measure and the Smith et al. (1999) group attachment measure for team attachment.

Continuous rating scales were developed to deal with this limitation and adapted the social and personality psychology methodology and method (e.g., Simpson, 1990; Simpson, Rholes, & Phillips, 1996). A variety of measures were later developed within this perspective and the items and psychometric properties are summarised in the literature (e.g., Mikulincer & Shaver, 2007a). A contested issue in cross sectional self-report designs is common method bias and common method variance. Common-method bias is the spurious “variance that is attributable to the measurement method rather than to the constructs the

measures represent” (Podsakoff, Mackenzie, Podsakoff & Lee, 2003, p. 879) or equivalently as “systematic error variance shared among variables measured with and introduced as a function of the same method and/or source” (Richardson, Simmering, & Sturman, 2009, p. 763) and studies affected by common-method bias suffer from false correlations and run the risk of reporting incorrect research results. However, in order to prevent and reduce common method variance a number of recommendations have been made (Conway & Lance, 2010; Podsakoff et al., 2003). These include randomising the order of scale items, separating predictors/criterion which were followed in the research. Further, since error variance is inversely proportional to the degree of freedom, a larger sample size than the one required for the statistical analysis used has been obtained (n=360). The potential psychological pressure of doing such a survey was also minimised with a pre-participation briefing via email (see Appendix 2), after which the participant could choose whether or not to access the questionnaire. This email explained: a) the purpose of the study; b) that there were no right or wrong answers; c) that participation was voluntary and participants were informed that their responses were anonymous, and that no judgment or evaluation is thus implied by the nature of the study.

3.4 Construction of Questionnaire

The full survey instrument is given in Appendix 1 and the research adapted existing validated scales (measures) from previous research, and full details of these are given below. Prior to finalising the questionnaire items, the survey was subject to a pilot study.

3.4.1 Pilot Study

A pilot study was undertaken with 15 participants who gave feedback on layout, wording and items. The pilot study led to some of the instructions being adapted to make

them clearer. Overall, no issues or problems were found with the questionnaire and the scales therein. The pilot process was as follows:

Participants: The pilot study utilised 10 MSc Occupational Psychology students who had experience of working in a team, and five staff members of a School of Psychology.

Procedure: The participants completed the survey in the researcher's presence and then discussed any uncertainties, problems, confusion or discrepancies experienced and any suggestions they had.

Analysis: Where issues were noted, the survey was adjusted in light with these. The central change was to elaborate the instructions for the various scales. The finalised survey was then sent out to the study participants.

3.4.2 Measures

In this current research the existing published scales were used and were also subject to factor analysis. For missing data as a general rule the SPSS analysis commands perform computations with missing data by omitting the missing values and this system generated approach was used in the research. Details of the all measures used in the study are given below.

3.4.3 Experiences of Close Relationship (ECR)

Individual attachment (global) style was measured with the Experiences in Close Relationships (ECR) scale (Brennan et al., 1998). The ECR has two sub scales: Avoidance or Discomfort with Closeness and Discomfort Depending on Others, and Anxiety or Fear of Rejection and Abandonment. The Anxiety scale of the ECR assesses preoccupation with relationships, fears of rejection, a desire to merge with others and anxiety over abandonment.

It measures an individual's representation of himself with regards to his self-worth and to whether or not he deserves the closeness of others. For the anxious scale, sample items include: "I get frustrated if others are not available when I need them" and "I find that others don't want to get as close as I would like". The ECR consists of 36 items rated on a seven-point Likert scale, ranging from strongly disagree (1) to strongly agree (7). In the survey, participants were asked to rate on the seven-point scale the extent to which each item characterises their experiences in close relationships, in relation to 'others' as suggested by the directions for scoring the ECR.

The Avoidance scale contains items that measure discomfort with closeness and dependency, denial of attachment needs, compulsive self-reliance, and avoidance of intimacy, which refers to an individual's perception of others and whether or not they are available and supportive. Sample items for the avoidance scale would be: "I want to get close to others, but I keep pulling back" and "I am nervous when others get too close to me". Attachment security is defined as the lack of anxiety and avoidance.

Items from the ECR were phrased in line with the context used and the word "others" used as suggested instead of labels such partners (Mikulincer & Shaver, 2016; Fraley, Heffernan, Vicary, & Brumbaugh, 2011) and as used by previous studies in the workplace area (e.g., Littman-Ovadia et al., 2013; Towler & Stuhlmacher, 2013). Whereas an ECR item would state, "I get frustrated when romantic partners are not available when I need them," this same item was worded appropriately for a work context. Thus it became: "In a close working relationship, I get frustrated when others are not around as much as I would like." This process was applied to all items as necessary. Higher scores indicate greater attachment anxiety and attachment avoidance. The ECR, therefore, simultaneously produces both a score for attachment anxiety and a score for attachment avoidance.

This current study used the full 36-item measure of attachment given its use in workplace studies and its greater perceived validity and reliability. The ECR has demonstrated good psychometric qualities and been translated in several languages including Japanese, Chinese to Italian (Alonso-Arbiol, Balluerka, & Shaver, 2007; Lafontaine & Lussier, 2003; Mallinckrodt & Wang, 2004; Mikulincer & Florian, 2000), making it a very useful, versatile and cultural attachment measure. The ECR has also been widely applied in organisational settings such as leadership and career development (Harms, 2011; Richards & Schat, 2011).

Before using the scale in the analysis it was subject to a factor analysis and a Cronbach alpha analysis. As it was an existing reliable and valid scale the factor analysis looked at a two factor solution, as two factors were theoretically expected (Pallant, 2013). A principal axis factor with a varimax rotation of the 36 Likert scale questions from the ECR was conducted on the data. An examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable (KMO=.89). The results of an orthogonal rotation of the solution are shown in Appendix 3. Loadings less than 0.50 were excluded, and the analysis yielded two factors as presented in the Appendix 3 (factor loadings \Rightarrow .30 are given). The more stringent .50 level was used although from .30 as a loading level has been suggested as acceptable (Field, 2013). The two factors explained 42% of the variance which is acceptable (Field, 2013; Pallant, 2013). The factor loadings are given in Appendix 3.

Any item that has less than .50 loading was not included, and any cross loading of .30 or more were also excluded. Using this .05 level criterion, seventeen of the original anxiety items were loaded onto the anxiety factor and sixteen items from the eighteen original avoidant items were loaded onto the avoidance factor. A total of 5 avoidant items were eliminated because they did not contribute to the factor structure and failed to meet a minimum criterion of having a primary factor loading of .5 or above, or cross-loading of .3 or

above. The items (e.g., “Just when someone starts to gets close to me I find myself pulling away”) were excluded in the subsequent analysis. The resultant valid items were then used in the current research and an alpha of .91 was found for Anxiety scale and .82 for the Avoidant scale in this current study. The items explained 42% of the variance (see Appendix 3). High scores for anxious indicates higher Anxious attachment = 7 is high anxious and for Avoidant a high score represents high avoidant, 7 = high avoidance

Table 3.2 *ECR items removed*

<u>Items</u>	<u>Anxious</u>	<u>Avoidant</u>
5. Just when someone starts to get close to me I find myself pulling away.	.40	.60
11. I want to get close to others, but I keep pulling back.	.56	.54
13. I am nervous when another person gets too close to me.	.44	.59
17. I try to avoid getting too close to others.	.40	.62
21. I find it difficult to allow myself to depend on others that are close to me.	.40	
	.42	
22. I do not often worry about being abandoned.		

3.4.4 Team Attachment

Team attachment style is defined as the attachment style which is held by an individual for a specific team and this was measured by adapting the Smith et al. (1999) Social Group Attachment Scale (SGAS) adapted to refer to team, not the group. The scale comprises the same two dimensional subscales as the ECR in a group context: Group Attachment Avoidance and Anxiety, with items that tap into internal working models and perceived attachment behaviours (Bartholomew & Horowitz, 1991; Collins & Read, 1990)

and asks individuals to consider their membership of a group or team. Whereas the ECR measured global attachment style, the team attachment scale examines attachment to the team as a whole. In this current research the alpha coefficient for the team anxious scale was .84 and for the team avoidance scale was .86. As with the studies of ECR, the team attachment self-report measures have demonstrated that adult attachment styles are most accurately conceptualised as regions in the two-dimensional space delineated by anxiety and avoidance (Marmarosh & Markin, 2007; Van Vianen et al., Feij, 2003; Meredith et al., 2011). Therefore, the current factor analysis asked for and looked at a two factor solution and a confirmatory Principal Axis Factor (PAF) with a varimax rotation of the 25 Likert scale questions was conducted on the data. An examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable (KMO=.88). The results of an orthogonal rotation of the solution are shown in Appendix 3, and loadings less than 0.50 were excluded, and any cross loading at .30 or more. The analysis yielded a two factor as presented in the Appendix (factor loadings \geq .30 are given in the Appendix 3).

From the original 25 items, for the anxiety scale, nine items were loaded onto the factor anxiety and six items were loaded onto the avoidant factor, and these are noted in Table 3.3. A total of ten items were removed because they did not contribute to the factor structure and failed to meet a minimum criterion of having a primary factor loading of .5 or above, or cross-loading of .3 or above. Examples of the items are “I just want to feel completely at one with my team” and “I am somewhat uncomfortable being close to my team” that did not load above .3 on any factor and were therefore not used in the analysis. For both scales a high score indicates high avoidance or anxious scores. The scale used was 1 being strongly disagree through to 7 being strongly agree. Individuals were asked to complete the 25-item, seven-point Likert-type measure considering their membership in a team that was important for them. Sample items in the scale are: “I sometimes worry that I

will be hurt if I allow myself to become too close to my team”; “My team is never there when I need it”; “I am comfortable depending on my team”; and, “Often my team wants me to be more open about my thoughts and feelings than I feel comfortable being”. Items were designed to evaluate anxiety and concern about acceptance (e.g., “I often worry that my group doesn’t really accept me”) and measure rejection of intimacy (e.g., “I am nervous when my group gets too close”). The scale used a 1 (strongly disagree) to 7 (strongly agree) rating with 1 being a low score on team anxiety or team avoidance and 7 a high score.

Table 3.3 *Team Attachment items removed*

<u>Items</u>	<u>Anxious</u>	<u>Avoidant</u>
3. I want to feel completely at one with my team.		-.45
5. I do not often worry about my team getting too close to me.	-.32	
11. I am comfortable not being close to my team.		.44
13. I am somewhat uncomfortable being close to my team.	.59	.43
14. My team is never there when I need it.	.38	.62
15. I find it difficult to completely trust my team.	.43	.60
16. I don't worry about being alone or not being accepted by my team.	-.35	
18. I am not sure that I can always depend on my team to be there when I need it.	.38	.67
20. I am comfortable having my team depend on me.		-.44
25. I do not often worry about being abandoned by my team.	-.40	

3.4.5 Team Member Exchange

TMX was measured with the Ford & Seers (2006) TMX 12-item measure which measures an overall TMX, and two sub dimensions of TMX contributions and TMX receipts for each group member (Ford & Seers, 2006; Seers, Ford, Wilkerson, & Moormann, 2001,

Seers, Petty, & Cashman, 1995) and the TMX was used as an overall score in this study. Keup Bruning, & Seers (2004) also reported predictive validity evidence with TMX correlated with perceived group performance (.22), group cohesion (.28) and group effectiveness (.19), and Ford and Seers (2006) reported alphas of .72 and .85, while Bakar and Sheer (2013) found an alpha of .89. The current study found an alpha of .89 for the overall TMX scale and the factor analysis in this study found the two sub-factors which mirrored the outcome of the original studies and factor loadings from the current research are reported in Appendix 3 and all items were therefore used in the study. Examples of items were questions such as: “When other group members are busy, I often volunteer to help them out”; and statements such as: “When I am busy, group members often volunteer to help me out.” In this study participants responded on a seven-point Likert type scale ranging from 1 (strongly disagree) to 7 (strongly agree). All 12 items were then used to provide an overall measure.

3.4.6 Organisational Citizenship Behaviours

Organisational Citizenship Behaviour (OCB) was assessed using the 16-item measure from Lee and Allen (2002), which provides an overall OCB score and two sub scales. They report a confirmatory factor analyses which supported the scale structure, as did Rich, LePine and Crawford (2010), and this was confirmed in the current study. Lee and Allen (2002) had reported reliabilities above .83. The factor analysis in this study found the factors in line with the original studies and the factor loadings are reported in Appendix 3. There was a Cronbach’s alpha of .92 for the overall scale in this current study. All items were therefore used in the study. This scale is used to report an overall OCB score in this research. Each item was measured on a seven-point Likert frequency scale from 1 (never) to 7 (always).

Sample items included “Help others who have been absent” and “Defend the organisation when other employees criticise it”.

3.4.7 Self-Performance and Team Performance Measures

A self-rating of performance was measured with the question, “How well do you think you have performed in your job recently?” and for team performance with “How well do you think your team has performed recently?” The rating was on a 1 (very poorly) to 7 (extremely well) scale with 7 representing the highest possible performance score. Single item measures have been seen to achieve similar result, and are acceptable and desirable in cases (Cheung & Lucas, 2014; Gardner et al., 1998) and useful in organisational settings where length of questionnaires are an issue. Studies such as Bergkvist and Rossiter (2007), Nagy (2002); Gardner et al. (1998), and Gillet, Colombat, Michinov, Pronost, and Fouquereau, (2013) all support the use of single item measures in similar contexts to the current research. A key issue in the use of single item measures is also given the length of the questionnaire and this selection of measure was a pragmatic decision and in line with the studies constructs, and has been seen to provide similar results as longer scales (Bergkvist & Rossiter, 2007). The research is asking about the perception or overall view of performance, to which a single item measure is well suited and is pragmatic for studies in organisations where length of surveys are often an issue (e.g. Bergkvist & Rossiter, 2007; Fisher, Matthews & Gibbons, 2016; Hazan & Shaver, 1987; Robins, Hendin & Trzesniewski, 2001; Williams & Smith, 2016).

3.4.8 Job Satisfaction

Job satisfaction was measured with a single item. This item asked “Overall, how satisfied are you in your job?” rated on a 1 (extremely dissatisfied) to 7 scale (extremely

satisfied) with 7 representing the highest job satisfaction score. In support of single item scales, Wanous et al. (1997) and Nagy (2002) suggested job satisfaction may be best measured by single items and there been numerous studies with similar results as those with longer scales with reported reliability and validity (e.g. Cheung & Lucas, 2014; Gardner et al., 1998; Nagy, 2002; Wanous et al., 1997).

3.4.9 Team Identification

Team Identification was measured using Doosje, Ellemers & Spears (1995) four-item measure which has items such as “I see myself as a member of my team” and “I identify with other members of my team”, with an additional item included that read “Being a member of the team is important to me”. The scale has shown predicative validity in several studies (e.g. Doosje et al., 1995; Doosje, Spears & Koomen, 1995). In this current research factor analysis supported the scale structure and factor loadings are presented in Appendix 3. The 5 items were rated in a 1 (do not agree at all) to 7 (agree completely) scale with the seven representing the highest level of identification with the team. In the original study Doosje et al.’s (1995) found an alpha of .83. and the Cronbach’s alpha, and in this research the alpha was .89.

3.4.10 Control Variables

To control for possible extraneous influences, the following were included as control variables. As interaction is a key theme in this research, possible factors were selected that may influence the key study variables were the frequency of interaction with the team, the length of team interactions, size of team, time spent with team, age and length of service, whether the team was a temporary or permanent team, gender, and level of education. For

variables that were categorical data dummy variable or the SPSS split cases function was used in the analysis of this data.

3.4.11 Ethical Procedures

The procedure for the study followed the BPS code of ethics and the London Metropolitan University procedures. This entailed an evaluation of any potential risk. Key issues considered were to ensure informed consent, sensitivity of subject matter, confidentiality and anonymity, and opportunity to withdraw. There was no deception involved in the study and all issues relevant to taking part in the study explained to the participants in writing. If participants wished to take part after reading the email they then clicked on a link which took them to the questionnaire on the online survey platform, SurveyMonkey.

Informed consent was obtained via the email inviting participants to take part (shown in Appendix 2). This gave full details of the study, noted the anonymity of the process and stressed that no person could be identified from the survey. Given the snowball strategy it is all but impossible to identify any participant, guaranteeing a greater degree of anonymity. The only potential for identification of participant was with the offer of a prize draw. For this to function those that wanted to enter for the prize draw had to submit an email. If participant had any queries or concerns they were given an email to contact the researcher for debriefing.

3.4.12 Sample Design

The research used a snowball sampling strategy (Bryman, 2012). The research examines individuals who are working and as part of their job work in the UK and are part of at least one work team, and not a group. This intended population was therefore those in the

general working population who have experience of working in a team. However, it is difficult to access a large number of participants in these settings. Snowballing is seen as useful to access participants and allows hard to reach populations to be accessed (Rudestam & Newton, 2014). This sampling design was selected given the need for a broad sample and the nature of the population, and thus the need to achieve a wide range of participants and that is difficult to assess such a wide range of organisations. The need is to achieve a larger sample to use more advanced multivariate statistics and that a large sample allows for better statistical power (Field, 2013).

Snowball sampling is a non-probability sampling technique where existing or initial study participants recruit or recommend further participants from among their acquaintances (Herz, 2015; Ravn & Duff, 2015). This does not allow for the use of traditional random sampling methodologies which require that the entire population be known, such as the population of students at a university. Instead, the snowball sampling methodology presumes social networks exist between members of a target population to build a sample (Atkinson & Flint, 2001). Snowball sampling is more directed and purposeful than many other non-random sampling techniques, such as convenience sampling that focuses only on the most easily identified and reachable members of a population.

As sample members are not selected from a sampling frame, snowball samples, they are potentially subject to their own specific biases. For example, people who have many friends are more likely to be recruited into the sample. However, this has been shown to be widely used, useful and valid in research with valid data (Heckathorn, 2002), and has been used in similar in organisational research and attachment research (e.g., Bogaerts, Vanheule, & Declercq, 2005; Lee & Allen, 2002).

3.4.13 Sample

There was a total of 360 responses with a mean age of 40.06 (SD=11.05), an average length of service of 4.05 years (SD = 1.62). On average, participants scored 3.32 (SD=1.04) on global avoidant attachment and 3.32 (SD=0.87) on anxious attachment, and for team avoidant 3.04 (SD=1.05) and 2.49 (SD=0.93) on team anxious attachment. Demographics are provided in Table 3.4 below.

Table 3.4 *Sample demographics*

Gender	<u>Female (n)</u>	<u>Male (n)</u>	<u>No Gender (n)</u>		
	58.6% (211)	22.8% (82)	18.6% (62)		
<u>Not Stated</u>	<u>School Only</u>	<u>Post School College</u>	<u>Bachelor Degree</u>	<u>Master Degree or Higher</u>	
	2.2% (8)	5.0% (18)	15.6% (56)	58.6% (211)	18.6% (63)
<u>Team Interactions</u>	<u>Face-to-face</u>	<u>Virtual Written</u>	<u>Virtual Auditory</u>	<u>Virtual Visual</u>	
	71.8% (242)	21.1% (71)	6.2% (21)	0.9% (3)	
<u>Frequency of Interactions</u>	<u>All work done with a team</u>	<u>Several times a day</u>	<u>Several Times a week</u>		
	23.6%	36.7%	17.8%		
<u>Average Team Size</u>	<u>2-3</u>	<u>4-5</u>	<u>6-7</u>	<u>8-9</u>	<u>10 or more</u>
	16.4%	31.7%	18.1%	10.3%	17.3%
<u>Position Held in Team</u>	<u>Leader/ Manager</u>	<u>Facilitator</u>	<u>Team Member</u>	<u>Other</u>	
	34.9%	7.8%	53.4%	3.9%	

3.4.14 Procedure

Those individuals that the research wished to include were those in employment and had as part of their job working in a team, see invite email in Appendix 2. This was the criterion for inclusion: if participants identified themselves as employed and working in a team they were included in the sample. Having this broader snowball sampling strategy was seen as being able to secure a much larger range of participants. However, there is also a potential issue such as bias with the sample dependent on the connections held by the initial participants. However, it has been noted that snowball sampling can provide comprehensive characterisations of unknown populations (Spren, 1992).

In this research the participants were asked to forward the email invite to the study, via email, to suitable colleagues or acquaintances. The email made the inclusion criterion clear and asked only for those that met this to complete the questionnaire. In this process the sample group appears to grow like a rolling snowball. As the sample builds up, enough data is gathered to be useful for the research. In this study a wide range and diverse range of participants was needed, and access to organisations for research is difficult. Potentially a snowball sample allows for a larger and more diverse sample which may allow for a greater degree of validity compared to it if were conducted in a single organisation as there will be a more limited range.

The questionnaire was placed on a leading research website called SurveyMonkey. Emails were sent inviting participation with a link to the online survey. These were distributed by social media. This strategy is seen as a mainstream method of survey research (Ravn & Duff, 2015). The use of social media sites is seen to attract respondents, rather than traditional methods such as advertising in newspapers or distributing paper versions in workplace. This strategy is increasingly seen to be more effective. The use of internet survey methods also minimises input errors as the fixed responses will not allow if input

errors such as outliers are minimised. The online web internet links used were via the social network sites of LinkedIn and Facebook. These were all individuals who would be more likely to be working in a team context and were asked only to complete the survey if they did currently work in a team. They were contacted by an email sent to them with details of the study, and asked for them to complete the study only if they currently worked in a team.

There are advantages and disadvantages of this use of the internet. First is the issue of selecting participants based on their willingness to access an internet web site and complete surveys electronically. There may be some bias in terms of computer access and computer competence. There is the accompanying risk that it might be more likely for participants to not to respond carefully and their responses using this more impersonal format and both conscious and unconsciousness distortion may still be an issue. There are still unresolved issues in this sampling approach, for example there is not yet enough work around the comparability of internet versus other samples. However, work from similar approaches such as personality questionnaires being conducted online has shown positive support and that comparable results are found (Rudestam & Newton, 2014; Wright & Stein, 2005).

However, besides increasing use there is strong support for the use of internet based sampling and is seen as positive (e.g., Rudestam & Newton, 2014; Wright & Stein, 2005). In the workplace an online survey may be seen positively as participants may appreciate the anonymity they have by addressing a machine rather than the researcher directly and they can complete the survey when convenient for them. There is also the possibility of obtaining geographically heterogeneous samples that may not be available when using traditional data collection strategies. The use of internet-based approaches may be seen in the modern digital world as a method that many participants seem to trust and feel comfortable with. It does seem clear that researchers can obtain a large number of responses very efficiently over the web and collect data in a form that allows for relatively painless analysis and respondents

also prefer the flexibility of doing a survey when it suits them. This may increase the face validity of the process and lessen issues such as social desirability as the researcher is not present. However, there are potential sources of error. For instance, the lack of consistency in conditions may reduce standardisation of administration.

Finally following the guidelines for power analysis (Newton & Rudestam, 1999) and using a power calculator for the analysis, the sample size of the statistical tests were seen as having sufficient power and being appropriate to use. Rudestam and Newton (2014) note that with a .05 significance level and a power of .80 if the size of the effects predicted are medium then a sample size of 64 will be needed to detect differences. With an increase in sample size, there is then a greater chance that the tests will detect any effects that exist in the sample. The overall sample of $n=360$ in this research is more than adequate for the statistical procedure used.

3.5 Data Analysis

SPSS 22 was used to perform the data analysis and the MEDIATE mediation macro (Hayes, 2013). These scales, as did this research, use Likert type scaling for many of the scales. For some this has raised some issues around the nature of measurement of these scales and a brief discussion on this is needed. The controversy is whether Likert scales can be analysed as interval data. This Likert type scaling presumes the existence of an underlying, or latent or natural, continuous variable whose value characterises the respondents' attitudes and opinions.

If it were possible to measure the latent variable directly, the measurement scale would be, at best, an interval scale. Treating Likert type scales as interval scales has long been controversial with some arguing that Likert type scales should be treated as ordinal data, and thus non-parametric statistics should be employed. Like the studies done in the area, this

research treated the continuous variables as interval type data. Parametric statistics were thus used as studies in the field (e.g., Mikulincer & Shaver, 2016; Zilcha-Mano, Mikulincer, & Shaver, 2012; Ronen & Mikulincer, 2012) and for the reasons that are outlined below.

As a trial, both parametric (e.g., t-test) and non-parametric (e.g., Mann-Whitney) tests were utilised, with basically the same result for the key relationships. Parametric statistics were used as many argue and have shown that Likert scales can indeed be analysed effectively as interval scales (Baggaley & Hull, 1983; Brown, 2011; Field, 2013; Maurer & Pierce, 1998; Vickers, 1999; Allen & Seaman, 2007) and support treating Likert scales as interval data as the “intervalness” and here it is an attribute of the data, not of the labels. To secure this it is also practice to label the two endpoints or just first, last and midpoint and to present the scale in equal visual intervals. This was done in the current research. Also, the scale item should comprise at least five and preferably seven categories. Furthermore, analysing Likert scales as interval values is possible when the sets of Likert items can be combined to form indices as most research in this field follows.

Despite this, there remains an important warning in this approach. Most researchers still insist that such combinations of scales are only valid if they pass tests such as the Cronbach’s alpha test or the Kappa test of intercorrelation and validity. Accordingly, in this study, all scales were subject to the alpha test for reliability. They all were above the accepted .70 level which was tested using Cronbach’s alpha. All scales were then also examined by following a factor analysis. In addition, the combination of scales to form an interval level index assumes that this combination forms an underlying characteristic or variable. Jaccard and Wan (1996, p. 4) review the literature on this issue and note that, “for many statistical tests, rather severe departures from intervalness do not seem to affect Type I and Type II errors dramatically”.

One assumption in the use of parametric statistics is the assumption of normality of the sampling distribution. An increasing approach to overcome this and now common place is bootstrapping. Bootstrapping is a computationally intensive method that involves repeatedly sampling from the data set. This increasing use of bootstrapping has seen a revision in the assumptions and use of statistics (Preacher & Hayes, 2008).

3.5.1 Factor Analysis

All scales used in the study were subject to factor analysis and Cronbach's alpha tests. It is accepted that a number of tests that provide a minimum standard should be passed before a factor analysis (or a principal component analysis) should be conducted. In using factor analysis, it is suggested that appropriate sample size are as follows: 50 cases is very poor, 100 is poor, 200 is fair, 300 is good, 500 is very good, and 1000 or more is excellent. As a rule of thumb, a bare minimum of 10 observations per variable is necessary to avoid computational difficulties. In this study we had an overall sample size of 360 (Comrey & Lee, 2013; Tabachnick & Fidell, 2001).

It is suggested that the determination of the number of factors to extract should be guided by theory, but also, at the same time, be informed by running the analysis and extracting different numbers of factors. The next step is to consider which number of factors yields the most interpretable results. This study was informed by the original scale structure and did not seek to take an exploratory or confirmatory analysis process in line with research question and design. To examine the sampling of the dataset the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was used and this measure varies between 0 and 1, and values closer to 1 are better. A value of .6 is a suggested minimum. In this study the overall Kaiser measure of sampling adequacy (MSA) for the scales was found to be within the range and this designates good to excellent factorability (Kaiser, 1970; 1981). Factor loadings

greater than .30 are considered to be significant (Nunnally & Bernstein, 1994), while others suggest .4 or .5 (Field, 2013; Pallant, 2013), and Stevens (2012) suggests using a cut-off of 0.4, irrespective of sample size, for interpretative purposes. When the items have different frequency distributions, some suggest using more stringent cut-offs going from 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good) or 0.71 (excellent) (Comrey & Lee, 2013; Tabachnick & Fidell, 2007). In this study .40 was used for the majority of the scales, however, the majority of items loaded on .55 or higher.

Bartlett's Test of Sphericity is a key index which tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is a matrix in which all of the diagonal elements are 1 and all off diagonal elements are 0. For the use of factor analysis, we need to reject this null hypothesis. In this study all scales conformed to this criterion.

3.5.2 Analytical Strategy

The central analytical strategy was the use of a mediation analysis. This is based on regression and a number of developments and controversies need to be reviewed. The first issue is that of bootstrapping, and the second is the different models of mediation.

SPSS has “bootstrapping” as an option within SPSS. This accessibility of bootstrapping makes a key assumption for parametric statistics, for example multiple regression, such as normal distributions no longer a constraint as it in effect, the bootstrapping process in effect creates normality (Field, 2013). Bootstrapping is a method for deriving robust estimates of standard errors and confidence intervals for estimates such as the mean, median, proportion, odds ratio, correlation coefficient or regression coefficient. What this means is that more sophisticated tools for testing and constructing hypotheses can be used. Bootstrapping is a useful alternative to parametric estimates when the assumptions of those methods are in doubt, or where parametric inference is impossible or requires very

complicated formulas for the calculation of standard errors such as in the case of computing confidence intervals for the median, quartiles, and other percentiles (Field, 2013; Hayes, 2013; Preacher & Hayes, 2008). Essentially this means that the assumption of a normal distribution which is often hard to determine or unknown is overcome by the use of the bootstrapping process.

As this bootstrapping process deals with one of the controversies discussed in the method chapter, bootstrapping was used in the statistical analysis in line with standard conventions (Field, 2013; Preacher & Hayes, 2008). Bootstrapping is now seen as the approach most useful to ensure key assumptions are met and as such was used in the analysis of the data. However, it is noted by some statisticians (e.g., Brace, Kemp, & Snelgar, 2012; Field, 2013; Pallant, 2013) that many statistical methods are robust and can often withstand some of the assumptions being violated. However, the statistical tests for the analysis used in the current study met their key assumptions, and bootstrapping was used to ensure key assumptions of normality met in the regression analysis. Therefore, the assumptions of the tests were checked and deemed acceptable to use (Pallant, 2013). There are various approaches to testing hypotheses and these are dependent on the assumptions underlying the data. As a control various alternative statistical techniques were explored and the overall results did not differ.

The indirect and direct effects of Attachment Styles were explored using two mediation models. Firstly, a simple mediation model for the testing for mediation with one independent variable and one mediator was used. The Baron and Kenny (1986) four step mediation process was utilised for this. In the Baron and Kenny (1986) procedure mediation is whether an indirect effect of a predictor on an outcome through a third (mediating) variable is significant or not. There are numerous writings on the mediation process, however, none are as influential and indeed controversial as the Baron and Kenny (1986) and this process is

widely used (Pardo & Román, 2013). There are debates on this process and Hayes (2013) and Preacher and Hayes (2008) suggest an alternative process which is used in this study.

The Baron and Kenny (1986) process is where the effect of an independent variable (X) is transmitted to a dependent variable (Y) through a third mediator variable (M) and they outline four or often three regression steps for this. This is normally followed by a Sobel test which tests whether the indirect effect of the independent variable on the dependent variable through the mediator variable is significantly greater than zero (Field, 2013). In this approach all four criteria (or steps) need to be met to support full mediation:

Step 1: The cause or variable must be correlated with the outcome. In our study, for instance, attachment styles need to be related to the outcome variables such as OCB and performance.

Step 2: The cause or variable is shown to be correlated with the mediator. In the regression the mediator, such as TMX and Team Identification in the current study must be shown to be related to attachment styles with the mediator acting essentially as the outcome variable.

Step 3: The mediator is shown to affect the outcome variable. In the current study an example is that TMX or Team Identification is related to the outcome variables of OCB, Job Satisfaction and the Performance ratings.

Step 4: To establish the mediation, the effect of both the mediator and independent variable are entered into the regression equation to establish mediation. For example, the relationship between attachment styles and the DV such as OCB must disappear when the mediator such as TMX is introduced into the regression equation predicting OCB. If the coefficient between IV and DV after introducing mediator into the regression equation remains significant but is reduced, there is evidence for what is often termed partial mediation. The use of the term is often criticised and the terms indirect and direct effects

preferred by some (Field, 2013; MacKinnon, 2008; Preacher & Hayes, 2008). These criteria can be used to informally judge whether or not mediation is occurring. It is now widely accepted that statistically based methods by which mediation may be formally assessed can be used as an alternative or to complement this process (Krull & MacKinnon, 1999; 2001; MacKinnon & Dwyer, 1993; MacKinnon, Warsi, & Dwyer, 1995). The most widely used procedure is the Sobel test (Field, 2013; Krull & MacKinnon, 1999; 2001; MacKinnon & Dwyer, 1993; MacKinnon et al., 1995).

Traditionally a Sobel test is calculated and this to test whether a mediator carries the influence of an IV to a DV. A variable may be called a mediator “to the extent that it accounts for the relation between the predictor and the criterion” (Baron & Kenny, 1986, p. 1176). The use of the Sobel test provides a more direct test of an indirect effect. In the case of simple mediation, the Sobel test compares the strength of the indirect effect of X on Y to the point null hypothesis that it equals zero. The Sobel test is essentially a type of specialized t-test that provides a method to determine whether the reduction in the effect of the independent variable, after including the mediator in the model, is a significant reduction and therefore whether the mediation effect is statistically significant. In the analysis if the effect of the IV on the DV becomes non-significant at the final stage in the analysis, full mediation is shown. This may not be a reasonable expectation. There might be several mechanisms by which an IV applies its influence on the DV, or it might have direct as well as indirect effects. If the regression coefficient is substantially reduced at the final step, but remains significant, we can say that there is partial mediation. That is, part of the effect of the IV is mediated by the moderator but other parts are either direct or mediated by other variables not included in the model (MacKinnon et al., 1995). The Sobel test is seen to provide a simple yes or no to the question of whether mediation exists or not. However, there are other competing and differing views, for example MacKinnon (2008) suggests that

mediation exists on a continuum rather than being either present or absent. This in conflict with what Baron and Kenny (1986) suggest and what the Sobel test provides, and how it is most commonly used. Overall, mediation is the process in a chain in which it is assumed that the effect of one or more independent variables is transmitted to one or more dependent variables via a third variable, which is termed the mediator, and a variable may be called a mediator “to the extent that it accounts for the relation between the predictor and the criterion” (Baron & Kenny, 1986, p. 1176).

A key difference between the Baron and Kenny (1986) four-step procedure and others such as Preacher and Hayes (2008) is that a prerequisite for mediation to exist Step 1 of the Baron and Kenny model is that X has to exert a significant effect on Y without controlling for M. Preacher and Hayes (2008) do not see this first step as an essential step. Furthermore, the Baron and Kenny process tends to allow for only one independent variable, however, there are alternative methods (e.g., Hayes, 2013; Pearl, 2014) and these all have differing statistical assumptions (Pearl, 2014). For example, the Baron and Kenny approach uses the idea of a causal steps approach and this has the limitation that it does not directly quantify the mediation effect and test its significance, and researchers then use the Sobel test to test for significance.

The causal steps approach simply deduces the presence of the mediation effect based upon the significance of a series of tests. This can be dealt with by the use of the Sobel test in the process. Other approaches for testing mediation are the use of the product-of-coefficients approach to obtain a bootstrapped estimate of the mediation effect (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; MacKinnon, Lockwood, & Williams, 2004). Following this in this current research the Preacher and Hayes (2008) process of mediation was utilised to develop the mediation process where there were the four attachment styles as independent variables, TMX and Team Identification as two mediators and then each of the dependent

variables. Therefore, four analyses were run, one for each of the DVs, namely OCB, Job Satisfaction and the two performance ratings. This process suggested by Preacher and Hayes (2008) allows for multiple mediators and multiple independent variables and as such provides for a number of statistical options. It is seen as often comparable with processes such SEM (Preacher & Hayes, 2008) and in this research their MEDIATE macro was utilised. Preacher & Hayes (2004; 2008) have developed various Macros to run their mediation processes in SPSS (Field, 2013). The MEDIATE macro was via SPSS and used in this research to examine both individual and team related attachment styles with TMX and Team Identification as mediators with the two Performance measures, OCB and Job satisfaction as dependent variables so four MEDIATE analyses were conducted.

3.6 Summary

The study uses the social psychology approach to adult attachment styles and has a survey as the as the data collection technique, using existing attachment, team and performance related scales. The use of the group attachment scale (Smith et al., 1999) in the team context is a new application of this scale. This positivist methodology is used to allow the further development of the existing adult attachment paradigm to the workplace and specifically teams. A snowball sample design was used which allows for achieving access into difficult and hard to access populations, however, this approach does have some issues around potential bias. In the research there was a larger proportion of females and those with post-graduate degrees in the sample. The variables were first correlated with each other to produce a correlation matrix, and then various multiple regression analyses used to determine the relationship of the key independent variables (attachment styles) with the dependent variables (OCB, Performance) and the team process variables (TMX and Team Identification). Linear and Hierarchical regression was used to test hypotheses and to explore

the control variables which was followed by mediation analysis, with the potential mediators (TMX, Team Identification) analysed with the Baron and Kenny (1986) process and then with the Preacher and Hayes (2008) mediation macro, called `MEDIATE` to allow for the simultaneous analysis of all the independent variables and all the mediators. This is seen by some as superior to the Baron and Kenny process (Preacher & Hayes, 2004; 2008) as it allows for options such as multiple mediators such as in this research.

4. Results

This chapter presents the statistical analysis of the data and the testing of the hypotheses proposed. The chapter gives a brief commentary on the analytical strategy and the flow of the statistical reporting. The results are presented, firstly an overview of the data with the descriptive statistics is given and an analysis of the potential role of the control variables are explored from the descriptive statistics, and this then followed by an examination of the key hypothesis. The two mediation analyses conclude the chapter. The Baron and Kenny (1986) mediation process is firstly conducted for a simple mediation and this is followed by the Preacher and Hayes (2008) MEDIATE process.

4.1 Descriptive Statistics and Control Variables

The descriptive statistics are presented in Table 4.1 which allows an overview of the data. This provides for an initial understanding of the key relationships in the research.

Table 4.1 Means, standard deviations and inter-correlations of key study variables

Measure	M	SD	1	2	3	4	5	6	7	8	9	10
1. Anxious Attachment	3.02	1.04										
2. Avoidant Attachment	3.32	.87	.22**									
3. Team Anxious	2.49	.94	.46**	.34**								
4. Team Avoidant	3.04	1.05	.24**	.37**	.49**							
5. Team Identification	5.59	1.14	-.05	-.22**	-.28**	-.59**						
6. OCB	4.87	1.02	-.05	-.13*	-.02	-.22**	.39**					
7. Job Satisfaction	4.74	1.42	-.10	-.13*	-.19**	-.23**	.44**	.27**				
8. Individual Performance	5.61	.94	-.10	-.17**	-.22**	-.14*	.28**	.35**	.25**			
9. Team Performance	5.36	1.13	-.15*	-.18**	-.29**	-.52**	.44**	.20**	.26**	.47**		
10. TMX	5.05	.91	-.08	-.14*	-.25**	-.45**	.45**	.31**	.32**	.32**	.51**	
11. Frequency of interaction	2.64	1.59	.01	.09	.04	.25**	-.20**	-.32**	-.09	-.10	-.16	-.17**

Note: ** $p < .01$; * $p < .05$. OCB, Organisational Citizenship Behaviours; TMX, Team Member Exchange

This correlation matrix displays evidence for the role of attachment style with avoidant (global) attachment, team anxious attachment and team avoidant attachment all negatively associated with OCB, Job Satisfaction, self-rating of performance, rating of team performance, TMX and Team Identification. This indicates that, as expected these three attachment styles are linked to lower levels of OCB job satisfaction, self-rating of performance, rating of team performance, TMX and Team Identification. However, global anxiety was only associated with one dependent variable which was team performance. Higher reported global anxiety is thus associated with lower perceptions of team

performance. Global and team attachment styles were associated with each other as expected.

The influences of extraneous variables that may affect the IVs' influence on the DV were explored and presented. A full correlation matrix of these is provided in given in Appendix 4. The frequency or how often the team interacted was negatively associated with TMX, OCB, Team Identification and Team Performance, and positively with team avoidance. This indicates that more reported team interaction is related to positive levels of TMX, OCB, Team Identification and team performance, with lesser reported interaction linked to greater team avoidance. The more the senior level in the team was linked with higher levels of Team Identification and OCB. Those seen as more senior in teams therefore tend to have greater identification with the team and more organisational helping behaviours. Age and anxiety (global) were also linked with older individuals reporting lower levels of anxious attachment.

To further explore the influences of the control variables they were entered into a hierarchical regression analysis to determine the influence of these on the study variables and also as covariates in the MEDIANTE process. In the regression analyses control variables were entered in block one with the attachment variables next entered in block two and three. Within these analyses the control variables did not make any significant contribution when examined together with the other study variables. They were also entered as covariates in the mediate macro and did not significantly or meaningfully influence the research outcomes. The exception was how often and the frequency of contact with the team with avoidant attachment which was entered into the regression analyses and this is given below as a further check.

Overall while mostly supportive of the influence of attachment style as expected, bivariate correlations do not provide a full and complete account of unique relationships

suggested in this research. The research question is focused on direct and indirect influences and this is explored below with regression and the *MEDIATE* macro. Attachment styles have been shown to be associated with the hypotheses variables in the direction expected. It does therefore provide initial support for the overall research question of the role of attachment in organisations, and specifically team dynamics as represented by *TMX* and Team Identification. The nature of the attachment relationship between global and team attachment is explored next as this provides an important insight in the nature of the relationships in the research.

4.2 Relationship between Individual (Global) Attachment and Team Attachment

The first section of the research question was to explore the relationship between individual and team attachment styles. Hypotheses 1a and 1b suggested a relationship between individual and team attachment and is tested using correlations for the individual relationships and a multiple regression for the analysis of the joint effects. The hypothesis that individual attachment styles will be reflected in the team attachment styles is confirmed with reported results in Table 4.1. These correlations indicate that the relationship between avoidance attachment and team attachment was as proposed with moderate to strong correlations between them. Team avoidance was positively related to individual (global) avoidance, with Team anxious attachment positively related to individual (global) anxious attachment. Team avoidant attachment was also positively related to individual (global) anxious attachment. Team anxious attachment was positively related to individual (global) avoidance attachment. Individual (global) anxious and individual (global) avoidant being linked. Team anxiety and team avoidance were also associated. This indicates that both the global and team attachment styles are positively associated with each other.

Secondly, to test for the unique contribution of each attachment style a hierarchical regression was run to determine these relationships. The first hypothesis suggested the global and team avoidance scales should be strongly related. The correlations are presented in Table 4.1 above and linear regression was utilised as regression allows the determination of the unique contribution of each scale to be examined. In Table 4.2 the results of the analysis shows the influence of the ECR score on team anxiety, which indicates the positive relationship between global and team anxious attachment.

Table 4.2 *Linear regression with dependent variable: Team anxiety*

Steps	Variable	B	SE B	B
Block 1				
	ECR Anxious	.45	.05	.49**
Block 2				
	ECR Anxious	.41	.05	.44**
	ECR Avoidant	.27	.06	.25**

Note. $R^2 = .24$ for step 1 ($p = .00$); $\Delta R^2 = .06$ for step 2 ($p = .00$); * $p < .05$; ** $p < .00$

Hypothesis 1a is therefore supported, there is a direct relationship between the Global (ECR) anxiety scale and the team anxiety attachment scale. The overall positive relationship is highlighted in Table 4.2 which indicates both global attachment styles contribute to team avoidance with global attachment having the greater contribution as expected.

Table 4.3 *Linear regression with dependent variable: Team avoidance*

Steps	Variable	B	SE B	B
Block 1				
	ECR Avoidant	.43	.07	.34**
Block 2				
	ECR Anxious	.40	.07	.15**
	ECR Avoidant	.15	.06	.34**

Note. $R^2 = .14$ for Block 1 ($p = .00$), $\Delta R^2 = .01$ for Block 2 ($p = .00$), * $p < .05$; ** $p < .00$

Hypothesis 1b is therefore supported. There is a direct relationship between the ECR (Global) avoidance scale and the team avoidance attachment scale. The global scale contributes 14% of the variance in the team anxious scale, and with both the anxious and avoidance scale included 15% of the variance is explained, which indicates the greater contribution by global avoidance.

Overall then the analysis of correlations and regression supports the hypotheses that of association between the two related attachment orientations, so that ECR anxiety is linked to team anxiety, and ECR avoidance is linked to team avoidance. The hypotheses (1a and 1b) are supported in that the two similar attachment orientations are linked. However, the amount of variance explained indicates although some overlap there is a meaningful difference between the global and team attachment styles.

4.3 Relationships between Attachment Styles, OCB, TMX, Team Identification, Job Satisfaction and Performance Ratings

To test hypotheses 2 to 13, which are to examine the direct relationships between team attachment and individual attachment with OCB, TMX, Team Identification,

performance ratings and job satisfaction, a series of multiple regressions using bootstrapping were used to test the relationships. The attachment styles were the independent variable (IVs), with OCB, TMX, performance and job satisfaction respectively as dependent variable (DVs). The use of regression allows the relationship between the two attachment styles to be examined and the unique contribution of each of the two IVs to be determined, which correlation does not achieve. Each regression then determined the joint effects of the two attachment styles on the key outcome variables.

Hypotheses 2a and 2b suggest that the individuals self-rating of performance as the DV will be influenced by the each of the two individual attachment styles. With the two individual attachment styles as IVs, the two attachment styles together explained only 2% of the variance (adjusted $R^2 = .02$), and with the β for anxious attachment not significant while avoidance was significant ($\beta = -.17$; $p = .02$). This indicates a negative relationship between global avoidance and performance, however, not for global anxiety attachment. This is a significant relationship for avoidant attachment, and hypothesis 2b is supported, however, with only 2% of the variance explained.

To test hypotheses 3a and 3b, with the individuals' rating of their team's performance as the DV, and the two individual attachment styles as IVs, the individual attachment styles explained 4% of the variance (adjusted $R^2 = .04$), and with the β for anxious attachment not significant while avoidance was significant, with $\beta = -.20$, $p = .03$. Hypothesis 3b is therefore supported as there is a negative significant relationship for the rating of the team performance by avoidant attachment individuals, however, not for the anxiously attached.

To test hypotheses 4a and 4b, with the individuals rating of their own performance as the DV, and the two team attachment styles as IV's, the individual attachment styles explained 25% of the variance (adjusted $R^2 = .25$), and with the β for avoidance attachment significant $\beta = -.17$, $p = .02$, while anxious was not significant. Hypothesis 4b that anxious

attachment will be negatively linked to self-rating of performance is therefore supported; while hypothesis 4a, regarding anxiety avoidance, is not supported.

To test hypotheses 5a and 5b, the regression analysis with team performance as the DV had an $R^2 = .25$ and only team avoidance was significant with a $\beta = -.51$, $p = .00$. Therefore hypothesis 5b is supported and hypothesis 5a rejected. Team avoidance is associated with negative ratings of team performance.

For the suggested relationship of global attachment with job satisfaction, hypotheses 6a and 6b, individual's job satisfaction as the DV, and the two individual attachment styles as IVs, the attachment styles explained 3% of the variance (adjusted $R^2 = .03$), and with the β for both anxious and avoidant attachment not significant at the .05 or lower level. While there was a small correlation between avoidance attachment and job satisfaction of $r = -.13$; $p = .00$, with the combined relationship with both of these together there is no association with job satisfaction.

To test hypotheses 7a and 7b the regression analysis with job satisfaction as the DV and the two team attachment styles was $R^2 = .25$. Only team avoidance was significant with a $\beta = -.27$, $p = .00$, indicating a negative relationship between team avoidance and job satisfaction. Therefore hypothesis 7b is supported and hypothesis 7a rejected.

To test hypotheses 8a and 8b, a regression with OCB as the DV, and the two individual (ECR/Global) attachment styles as IVs, the regression found that individual attachment styles explained only 1% of the variance (adjusted $R^2 = .01$), and with the β for anxious attachment not significant, and avoidance was significant ($\beta = -.16$; $p = .05$). This is a significant relationship. However only 1% of the variance this may not be seen as meaningful relationship. While the hypothesis is therefore supported that there is a direct relationship, it is not a strong relationship with avoidant attachment having a negative relationship with OCB.

To test hypotheses 9a and 9b, the regression analysis with OCB as the DV and the two team attachment styles had an $R^2 = .06$. Team avoidance had a significant negative relationship with $\beta = -.31$, $p = .00$ for team avoidance and team anxiety not being significant $\beta = .11$, $p = .08$. The hypotheses that team avoidance is associated with OCB is supported.

To test hypotheses 10a and 10b the regression analysis with TMX as the DV and the two team attachment styles had an $R^2 = .02$. Only team avoidance was significant with a $\beta = -.30$, $p = .00$. Therefore hypothesis 10b that is supported suggested a negative relationship with TMX, and hypothesis 10a not supported.

To test hypotheses 11a and 11b, the regression analysis with TMX as the DV and the two team attachment styles had an $R^2 = .19$. Only team avoidance was significant with a $\beta = -.30$, $p = .00$, indicating a negative association. Therefore, hypothesis 11b is supported and hypothesis 11a not supported.

To test hypotheses 12a and 12b, the regression has Team Identification as the DV, and the two individual attachment styles as IVs, and the attachment styles jointly explained 4% of the variance (adjusted $R^2 = .04$), and with the β for anxious attachment not significant while avoidance was significant, with $\beta = -.30$, ($p = .00$), This is a significant relationship with 4% of the variance explained. Only team avoidance had a negative link with Team Identification and therefore hypothesis 12a is not supported and 12b is supported.

To test hypotheses 13a and 13b the regression has Team Identification as the DV, and the two team attachment styles as IVs, and the attachment styles jointly explained 33% of the variance (adjusted $R^2 = .33$), and with the β for anxious attachment not significant while avoidance was significant, with $\beta = -.57$, $p = .00$. Hypothesis 13a is not supported and 13b is supported as only team avoidance had a negative relationship with Team Identification.

4.4 Analyses of Both Global and Team Attachment Relationships

For testing the relationships between the team attachment styles and the outcome variables of OCB, job satisfaction and the performance ratings, the outcome variables were respectively the DV's, and the two team attachment styles as IVs the team attachment styles a hierarchical regression analysis using the bootstrapping process were used. As a control the variables of contact with your team and the frequency of interaction with the team were entered in block one in a hierarchical regression followed block two which was the two team attachment style variables for each of the DV's. The control variables were entered first and them to determine the added effect of the team attachment variables was entered in block two. This was to determine if team attachment significantly added to the predictive power of the variables entered in block 1. As the initial results above indicated a role for team attachment, the analyses for team attachment are given below.

4.4.1 Team Attachment and Organisational Citizenship Behaviour

Hierarchical regression was conducted to test whether the influence of the IVs anxious and avoidant attachment styles had an association with OCB. These results are given in Table 4.4 below. In block one, model 1 where the two control variables were only entered explained 9% of the variance, and in model two which includes the team attachment styles, the model explained 13% of the variance. In the analysis in the first model, $R^2 = .09$ and only "frequency of interaction" was significant ($\beta = -.19$, $p = .00$), while "How often do you have contact with your team" was not significant. In the second block, model two included the team attachment styles and these were added as block two. In this step R^2 changed to $R^2 = .13$, with a $R^2 \Delta$ of .4 and only team avoidant being significant ($\beta = -.23$, $p = .00$) of the four potential predictors. This indicates that that attachment style influence was constant over

and above the control variables and explained 4% of the variance in OCB. The hypotheses that OCB associated with team attachment is therefore supported, even when allowing for the influence of the control variables.

Table 4.4 *Hierarchical regression with dependent variable: OCB*

Steps	Variable	B	SE B	B
Block 1				
	Frequency of interaction	-.19	.06	-.07
	How often do you have contact with your team?	.02	.09	.16*
Block 2				
	Frequency of interaction	.01	.05	.01
	How often do you have contact with your team?	.09	.08	.08
	Team Anxious attachment	-.05	.07	-.04
	Team Avoidant attachment	-.51	.07	-.47**

Note. $R^2 = .09$ for Block 1 ($p = .00$); $\Delta R^2 = .04$ for Block 2 ($p = .00$); * $p < .05$; ** $p < .00$

This analysis shows the important role of team avoidance over that of both global (ECR) attachment. Frequency of contact plays an important role in explaining OCB, however, the role of avoidance attachment is consistent over OCB. The hypothesis that avoidance attachment has an influence on OCB is supported, however, anxious attachment does not have a significant role in explaining OCB.

4.4.2 Team Attachment and Team Performance

The results of the regression to test the hypothesis, which stated that team attachment would have a significant negative relationship with the team performance rating, are reported

in Table 4.5. The dependent variable was “How well do you think your team has performed recently?” with the two team attachment styles as IVs.

Table 4.5 *Hierarchical regression with dependent variable: team performance*

Steps	Variable	B	SE B	B
Block 1				
	Frequency of interaction	-.05	.06	-.07
	How often do you have contact with your team?	.18	.09	.16*
Block 2				
	Frequency of interaction	.01	.05	.01
	How often do you have contact with your team?	.09	.08	.08
	Team Anxious attachment	-.05	.07	-.04
	Team Avoidant attachment	-.51	.07	-.47**

Note. $R^2 = .04$ for Block 1 ($p = .00$); $\Delta R^2 = .22$ for Block 2 ($p = .00$); * $p < .05$; ** $p < .00$

The two control variables, frequency of interaction and “How often do you have contact with your team explained” 4% of the variance in the first block of the analysis, with “How often do you have contact with your team” having a significant coefficients ($\beta = .16$, $p = .00$), and in the second block with the two team attachment variables entered, only frequency of interaction ($\beta = .26$; $p = .00$) and team avoidance attachment ($\beta = -.23$; $p = .00$) were the significant predictors in block 2 and explained an extra 22% of the variance. The hypothesis that team attachment influences team performance is supported and contributes 22% of the variance in the team performance rating, with team avoidant attachment being the only significant predictor, with the two control variable’s and team anxiety not significant.

4.4.3 Team Attachment and Individual Performance

The results of the test of the hypothesis that team attachment would have a significant negative relationship with the individual self-rating of performance are given in Table 4.6. The dependent variable was “How well do you think you have performed recently?” with the two team attachment styles as IVs.

Table 4.6 *Hierarchical regression with dependent variable: individual self-reported performance*

Steps	Variable	B	SE B	B
Block 1				
	Frequency of interaction	-.01	.05	-.01
	How often do you have contact with your team?	.14	.07	.15
Block 2				
	Frequency of interaction	.00	.05	.01
	How often do you have contact with your team?	.14	.07	.14
	Team Anxious attachment	-.16	.07	-.16**
	Team Avoidant attachment	-.04	.06	-.04

Note. $R^2 = .02$ for Block 1 ($p = .00$); $\Delta R^2 = .04$ for Block 2 ($p = .00$); * $p < .05$; ** $p < .00$

In the first block the two control variables contributed 2% of the variance with “How often do you have contact with your team”, just above the .05 level of significance ($\beta = .15$, $p = .06$). As table 4.6 indicates, after controlling for the two control variables, the two team attachment styles added 4% to the explanation of individual rating of performance, and only team anxiety had a significant effect on performance ($\beta = -.16$; $p = .00$).

It is noted that in the earlier analysis of individual (global) attachment these two attachment styles only explained 4% of the variance with the β for anxious attachment significant ($\beta = -.16$; $p = .00$), while avoidance was not significant.

To further test the overall and combined role of all the attachment styles on self-rating of performance, both team and individual, simultaneously and also with the both the two identified control variables, a stepwise regression was conducted with both team attachment styles and individual (global) attachment styles, along with the control variables as IVs and performance as a DV. The analysis produced two blocks. In the first block the $R^2 = .3$ with the only significant predictor being team anxiety ($\beta = .18$, $p = .00$), and in block two $R^2 = .5$ and the two significant predictors were “How often you have contact with your team” ($\beta = .14$, $p = .02$) and “team anxiety” ($\beta = -.18$, $p = .00$). The hypothesis that team avoidance attachment has a relationship with individual performance is therefore rejected and that team anxiety does is supported. Team anxiety had a negative relationship with self-report of performance and regular contact with team seems to have a positive influence on self-reported performance. This indicates that teams may provide a useful source of support.

4.4.4 Team Attachment and Job Satisfaction

To test the hypothesis which stated that team attachment would have a significant negative relationship with job satisfaction a hierarchical regression was conducted with the dependent variable job satisfaction, and the two control variables entered in the first block, and then the two attachment styles in block two as IV's.

Table 4.7 *Hierarchical regression with dependent variable: Job satisfaction*

Steps	Variable	B	SE B	B
Block 1				
	Frequency of interaction	-.06	.07	-.06
	How often do you have contact with your team?	.07	.11	.05
Block 2				
	Frequency of interaction	-.03	.07	-.03
	How often do you have contact with your team?	.03	.11	.02
	Team Anxious attachment	-.12	.10	-.08
	Team Avoidant attachment	-.26	.10	-.19**

Note. $R^2 = .01$ for Block 1 ($p = .00$); $\Delta R^2 = .06$ for Block 2 ($p = .00$); * $p < .05$; ** $p < .00$

In Table 4.7 the control variable accounted for only 1% of the variance in job satisfaction and none of the two control variables were significant. After adding the team attachment styles in block two, $R^2\Delta = .06$ with team avoidance the only significant variable ($\beta = -.19$, $p = .00$). The hypothesis that team avoidance has a negative relationship with job satisfaction is therefore supported, and that of the role for team anxiety rejected.

4.4.5 Summary

The analyses of the direct relationships presented above between attachment styles and the dependent variables show a strong theme around the role of team attachment as a key variable. Overall the control variables do not make or contribute any meaningful insights in the analyses. They also do not add to the research questions and therefore are not further explored. The mediation process which looks at the indirect effects is now presented.

4.4.6 Mediation Analyses

The testing of indirect effects was conducted via a mediation analysis, to test hypotheses 14a, 14b, 16a and 16b which suggested a mediation process with global anxious as an IV. In Table 4.1 it is seen that there is no significant relationship with global anxious attachment style and OCB, team performance, individual performance and Job Satisfaction. This means that mediation is not possible as the first mediation step using the Baron and Kenny (1986) procedure is not possible and these hypotheses are not supported. Later analyses using the Preacher and Hayes (2008) process presented below confirmed this as all the attachment styles were entered into the mediation process to determine the joint influence of each attachment style.

4.4.7 Team Attachment and OCB, with TMX as Mediator

The results of the hypothesis testing of the relationship between team attachment and OCB, with TMX as the mediator is given in Table 4.7, where the mediation steps and statistics are given. In Step 1 of the mediation model, the regression of Team Avoidant Attachment scores on OCB, ignoring the mediator, was significant, ($\beta = -.22$, $p = .00$). Step 2 showed that the regression of the team attachment scores on the mediator TMX was also significant, ($\beta = -.45$, $p = .00$). Step 3 of the mediation process showed that the mediator (TMX), controlling for the OCB scores, was significant, ($\beta = .31$, $p = .001$). Step 4 of the analyses revealed that avoidant team attachment scores were not still a significant predictor of OCB. However, a Sobel test was conducted and found partial mediation in the model ($z = -3.39$, $p = .00$). Team avoidance does not have a direct relationship, however, there is an indirect relationship.

Table 4.8 Mediator analysis of team avoidant attachment, TMX and OCB

Steps	Type	Variable	B	SE B	B	Adj. R ²
1 (IV-DV)						
	Outcome (DV)	OCB				
	Predictor (IV)	Team Avoidance	-.22	.07	-.22**	.05**
2 (IV-M)						
	Outcome	TMX				
	Predictor	Team Avoidance	-.39	.05	-.45**	.20**
3 (M-DV)						
	Outcome	OCB				
	Predictor	TMX	.34	.09	.31**	.09**
4						
	Outcome	OCB				
	Mediator	TMX	.30	.10	.27**	
	Predictor	Team Avoidance	-.09	.07	-.09	.10**

Notes. * $p < .05$; ** $p < .00$; Sobel t statistic = -3.39; $p = 0.00$

4.4.8 Team Attachment and OCB, with Team Identification as Mediator

In Table 4.9 below the mediation steps and statistics are given for team attachment and OCB with Team Identification as mediator. In Step 1 of the mediation model, the regression of team avoidant attachment scores on OCB, ignoring the mediator, was significant ($\beta = -.17, p = .00$). Step 2 showed that the regression of the team attachment scores on the mediator, Team Identification, was also significant, ($\beta = -.59, p = .00$). Step 3 of the mediation process showed that the mediator (Team Identification), controlling for the OCB scores, was significant, ($\beta = .39, p = .001$). Step 4 of the analyses revealed that, controlling for the mediator (Team Identification), avoidant team attachment scores were not still a significant predictor of OCB. The Sobel test was conducted and found mediation in the model ($z = -4.42, p = .00$). Therefore, the hypothesis is supported and team avoidance does have an indirect relationship with OCB.

Table 4.9 Mediator analysis of team avoidant attachment, Team Identification and OCB

Steps	Type	Variable	B	SE B	B	Adj. R ²
1 (IV-DV)						
	Outcome (DV)	OCB				
	Predictor (IV)	Team Avoidance	-.22	.07	-.17**	.05**
2 (IV-M)						
	Outcome	Team ID				
	Predictor	Team Avoidance	-.64	.06	-.59**	.34**
3 (M-DV)						
	Outcome	OCB				
	Predictor	Team ID	.34	.07	.39**	.15**
4						
	Outcome	OCB				
	Mediator	Team ID	.35	.07	.39**	
	Predictor	Team Avoidance	.01	.07	.01	.14**

Notes. * p < .05; ** p < .00; Sobel t statistic = -4.42; p= 0.00

4.4.9 Team Attachment and Performance, with Team Identification as Mediator

For the mediation analysis of team attachment and team performance with Team Identification as mediator, results are given in Table 4.10 with the mediation steps and statistics. In Step 1 of the mediation model, the regression of team avoidant attachment scores on OCB, ignoring the mediator, was significant, ($\beta = -.52$, $p = .00$). Step 2 showed that the regression of the team attachment scores on the mediator, Team Identification, was also significant, ($\beta = -.59$, $p = .00$). Step 3 of the mediation process showed that the mediator (Team Identification), controlling for the team performance score, was significant, ($\beta = .44$, $p = .001$). Step 4 of the analyses revealed that, controlling for the mediator (Team Identification, $\beta = .20$, $p = .00$), avoidant team attachment scores were still a significant predictor of team performance ($\beta = -.40$, $p = .00$). For this relationship Team Identification does not have a mediation relationship between team avoidance and team performance.

Table 4.10 *Mediator analysis of team avoidant attachment, Team Identification and team performance*

Steps	Type	Variable	B	SE B	B	Adj. R ²
1 (IV-DV)						
	Outcome (DV)	Team Perform.				
	Predictor (IV)	Team Avoidance	-.55	.05	-.52**	.26
2 (IV-M)						
	Outcome	Team ID				
	Predictor	Team Avoidance	-.64	.06	-.59**	.34
3 (M-DV)						
	Outcome	Team Perform.				
	Predictor	Team ID	.43	.06	.44**	.19
4						
	Outcome	Team Perform.				
	Mediator	Team ID	.20	.08	.20**	
	Predictor	Team Avoidance	-.43	.07	-.40**	.29

Notes. * $p < .05$; ** $p < .00$; Sobel t statistic = n.s.

4.4.10 Team Attachment and Team Performance, with TMX as Mediator

In Table 4.11, the mediation steps and statistics are given. In Step 1 of the mediation model, the regression of team avoidant attachment scores on team performance, ignoring the mediator, was significant, ($\beta = -.52$, $p = .00$). Step 2 showed that the regression of the team attachment scores on the mediator, TMX, was also significant, ($\beta = -.45$, $p = .00$). Step 3 of the mediation process showed that the mediator (Team Identification), controlling for the team performance scores, was significant, ($\beta = .51$, $p = .00$). Step 4 of the analyses revealed that, controlling for the mediator (Team Identification), avoidant team attachment scores were still a significant predictor of team performance. Team avoidance does have a direct relationship and there is no mediation.

Table 4.11 *Mediator analysis of team avoidant attachment, TMX and team performance*

Steps	Type	Variable	B	SE B	B	Adj. R ²
1 (IV-DV)						
	Outcome (DV)	Team Perform.				
	Predictor (IV)	Team Avoidance	-.55	.05	-.52**	.26
2 (IV-M)						
	Outcome	TMX				
	Predictor	Team Avoidance	-.39	.05	-.45**	.20
3 (M-DV)						
	Outcome	Team Perform.				
	Predictor	TMX	.63	.09	.51**	.25
4						
	Outcome	Team Perform.				
	Mediator	TMX	.42	.09	.33**	
	Predictor	Team Avoidance	-.38	.06	-.36**	.35

Notes. * $p < .05$; ** $p < .00$; Sobel t statistic = n.s.

4.4.11 Team Attachment and Individual Performance, with TMX as Mediator

In Table 4.12, the mediation steps and statistics are given. In Step 1 of the mediation model, the regression of team avoidant attachment scores on performance, ignoring the mediator, was significant, ($\beta = -.14$, $p = .00$). Step 2 showed that the regression of the team avoidant attachment scores on the mediator, TMX, was also significant ($\beta = -.45$, $p = .00$). Step 3 of the mediation process showed that the mediator (TMX), controlling for the performance scores, was significant, ($\beta = .33$, $p = .00$). Step 4 of the analyses revealed that, controlling for the mediator (Team Identification), avoidant team attachment scores were not a significant predictor of performance. A Sobel test was conducted and found mediation in the model ($z = 3.73$, $p = .00$). Team avoidance does not have a direct relationship, however, there is an indirect relationship. TMX is a mediator in this relationship.

Table 4.12 *Mediator analysis of team avoidant attachment, TMX and self-rated performance*

Steps	Type	Variable	B	SE B	B	Adj. R ²
1 (IV-DV)						
	Outcome (DV)	Performance				
	Predictor (IV)	Team Avoidance	-.12	.06	-.14**	.02
2 (IV-M)						
	Outcome	TMX				
	Predictor	Team Avoidance	-.39	.05	-.45**	.20
3 (M-DV)						
	Outcome	Performance				
	Predictor	TMX	.34	.08	.33**	.10
4						
	Outcome	Performance				
	Mediator	TMX	.34	.09	.33**	
	Predictor	Team Avoidance	.03	.06	.02	.10

Notes. * $p < .05$; ** $p < .00$; Sobel t statistic = 3.73; $p = 0.00$

4.4.12 Team Attachment and Individual Performance, with Team Identification as Mediator

In Table 4.13, the mediation steps and statistics are given. In Step 1 of the mediation model, the regression of team avoidant attachment scores on performance, ignoring the mediator, was significant, ($\beta = -.14$, $p = .00$). Step 2 showed that the regression of the team attachment scores on the mediator, Team Identification, was also significant, ($\beta = -.59$, $p = .00$). Step 3 of the mediation process showed that the mediator Team Identification, controlling for the performance scores, was significant, ($\beta = .28$, $p = .001$). Step 4 of the analyses revealed that, controlling for the mediator (Team Identification), avoidant team attachment scores were not a significant predictor of OCB. However, a Sobel test was conducted and found partial mediation in the model ($z = -4.22$, $p = .00$). Team avoidance does not have a direct relationship, however, there is an indirect relationship.

Table 4.13 *Mediator analysis of team avoidant attachment, Team Identification and self-rated performance*

Steps	Type	Variable	B	SE B	B	Adj. R ²
1 (IV-DV)						
	Outcome (DV)	Performance				
	Predictor (IV)	Team Avoidance	-.12	.06	-.14**	.02
2 (IV-M)						
	Outcome	Team ID				
	Predictor	Team Avoidance	-.64	.06	-.59**	.34
3 (M-DV)						
	Outcome	Performance				
	Predictor	Team ID	.23	.05	.28**	.08
4						
	Outcome	Performance				
	Mediator	Team ID	.24	.08	.30**	
	Predictor	Team Avoidance	.03	.07	.04	.07

Notes. * $p < .05$; ** $p < .00$; Sobel t statistic = 4.22; $p = 0.00$

4.4.13 Team Attachment and Job Satisfaction, with Team Identification as Mediator

In Table 4.14, the mediation steps and statistics are given. In Step 1 of the mediation model, the regression of Team Avoidant Attachment scores on job satisfaction, ignoring the mediator, was significant, ($\beta = -.23$, $p = .00$). Step 2 showed that the regression of the team attachment scores on the mediator, Team Identification, was also significant, ($\beta = -.59$, $p = .00$). Step 3 of the mediation process showed that the mediator (Team Identification), controlling for the performance scores, was significant, ($\beta = .44$, $p = .00$). Step 4 of the analyses revealed that, controlling for the mediator (Team Identification), avoidant team attachment scores were not a significant predictor of OCB. Team avoidance does not have a direct relationship, however, there is an indirect relationship and Team Identification does act as a mediator.

Table 4.14 *Mediator analysis of team avoidant attachment, Team Identification and job satisfaction*

Steps	Type	Variable	B	SE B	B	Adj. R ²
1 (IV-DV)						
	Outcome (DV)	Job Satisfaction				
	Predictor (IV)	Team Avoidance	-.31	.09	-.23**	.05
2 (IV-M)						
	Outcome	Team ID				
	Predictor	Team Avoidance	-.64	.06	-.59**	.34
3 (M-DV)						
	Outcome	Job Satisfaction				
	Predictor	Team ID	.54	.08	.44**	.19
4						
	Outcome	Job Satisfaction				
	Mediator	Team ID	.57	.09	.46**	
	Predictor	Team Avoidance	.05	.09	.04	.18

Notes. * $p < .05$; ** $p < .00$; Sobel t statistic = n.s.

4.4.14 Team Attachment and Job Satisfaction, with TMX as Mediator

In Table 4.15, the mediation steps and statistics are given. In Step 1 of the mediation model, the regression of team avoidant attachment scores on job satisfaction, ignoring the mediator, was significant, ($\beta = -.23$, $p = .00$). Step 2 showed that the regression of the team attachment scores on the mediator, TMX, was also significant, ($\beta = -.45$, $p = .00$). Step 3 of the mediation process showed that the mediator (TMX), controlling for the OCB scores, was significant, ($\beta = .32$, $p = .00$). Step 4 of the analyses revealed that, controlling for the mediator (TMX), avoidant team attachment scores were not a significant predictor of job satisfaction. However, a Sobel test was conducted and found partial mediation in the model ($z = 3.98$, $p = .00$). Team avoidance does not have a direct relationship, however, there is an indirect relationship.

Table 4.15 *Mediator analysis of team avoidant attachment, TMX and job satisfaction*

Steps	Type	Variable	B	SE B	B	Adj. R ²
1 (IV-DV)						
	Outcome (DV)	Job Satisfaction				
	Predictor (IV)	Team Avoidance	-.31	.09	-.23**	.05
2 (IV-M)						
	Outcome	TMX				
	Predictor	Team Avoidance	-.39	.05	-.45**	.20
3 (M-DV)						
	Outcome	Job Satisfaction				
	Predictor	TMX	.51	.11	.32**	.10
4						
	Outcome	Job Satisfaction				
	Mediator	TMX	.43	.13	.27**	
	Predictor	Team Avoidance	-.14	.10	-.10	.11

Notes. * $p < .05$; ** $p < .00$; Sobel t statistic = -2.71; $p = 0.00$

4.5 Overall Mediation Analysis

The structure for final mediation analysis presented below in Figure 4.1. In addition to the mediation analysis above, a further mediation using all the attachment style independent variables (IVs) and both the mediating variables explored with both mediators simultaneously.

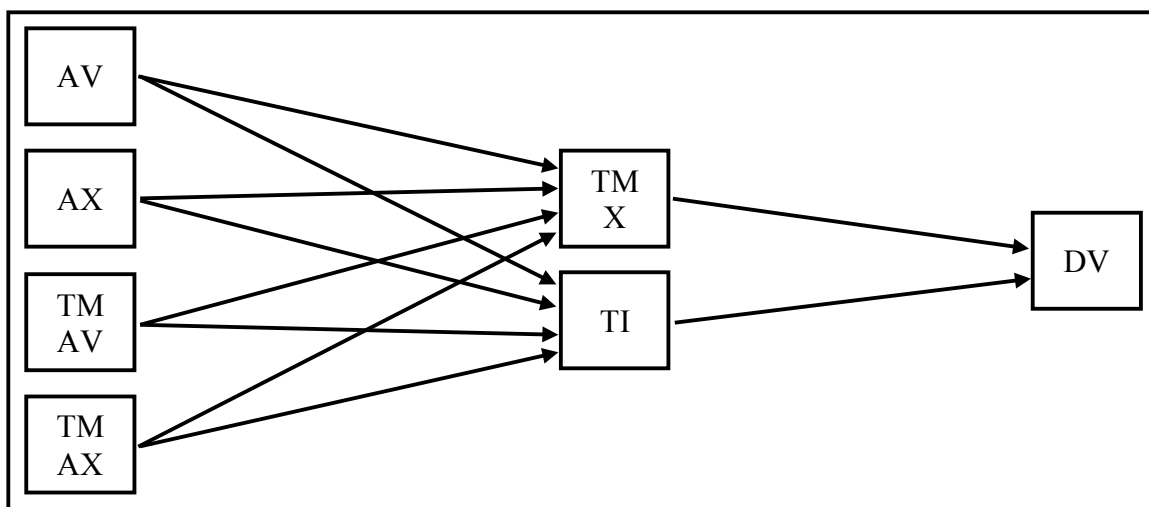


Figure 4.1. Model for Mediation Analyses.

This figure illustrates how specific variables were entered into the mediated model for analysis.

AV, avoidance attachment style; AX, anxiety attachment style; TM AX, team anxiety attachment style; TM AV, team avoidance attachment style; TMX, team member exchange, TI, Team Identification, DV, dependent variable (e.g., performance).

The mediation analysis was conducted to test the overall and joint influences of both the global (ECR) and team attachment styles as independent variables, with TMX and Team Identification as potential mediators, for each of the respective DVs outlined previously. The procedures outlined by Preacher and Hayes (2008) using the *MEDIATE* macro were followed in this mediation analysis to examine whether individual and team attachment styles

influence on the studies dependent variables were mediated by TMX and Team Identification. The *MEDIATE* macro for SPSS (Hayes & Preacher, 2011; Preacher & Hayes, 2008;) uses bootstrapping techniques to estimate the total and direct effects of an independent variable on a dependent variable as well as the indirect effects through one or more mediator variables. Inferences for indirect effects can be based on either percentile bootstrap confidence intervals or Monte Carlo confidence.

The process of multiple independent variables and two mediators cannot be easily examined using the Baron and Kenny (1986) mediation model, while the Preacher and Hayes (2008) process can do this and has a further advantage of greater statistical power without assuming multivariate normality in the sampling distribution, and as suitable as alternative techniques such as structural equation modelling (Hayes, 2013; Preacher & Hayes, 2008). In the analyses below an indirect effect is significant if the bias-corrected 95% confidence interval (*BC CI*) does not include zero (Field, 2013). All variables were standardised prior to the analyses. The full results of the mediation analysis using the Preacher and Hayes (2008) *MEDIATE* process are given in the appendices. The process was conducted for each the DVs as outcomes and the global and team attachment styles as IVs with TMX and TI as mediators.

The mediational analysis of both team and global attachment style relationships was conducted with both mediators, as outlined below. The key themes of the analysis is given below for each of the DV's. The indirect effects are also noted in the table for each DV below. This analysis adds to the research by simultaneously considering all the research variables. The full details of the analysis is given in the appendices. In the analysis only of the four potential attachment styles, only team avoidant attachment had a significant direct total effect in each of the four analyses.

4.5.1 Organisational Citizenship Behaviour

For the analysis of OCB as the DV, with both team and individual attachment styles as IVs, and TMX and Team Identification as the mediators, only team avoidance had a significant indirect effect as seen in Table 4.16.

Table 4.16 *Indirect effects on organisational citizenship behaviour*

	Mediator	Effect	SE	LLCI	ULCI
TMX					
	AV	.01	.01	-.01	.04
	AX	.01	.01	-.02	.04
	Team AV	-.09	.05	-.19	-.02
	Team AX	-.08	.02	-.05	.02
Team ID					
	AV	-.00	.02	-.04	.04
	AX	.04	.03	-.01	.09
	Team AV	-.21	.06	-.33	-.10
	Team AX	-.00	.03	-.05	.05

Notes. AV: Avoidant; AX : Anxious.

The only significant direct effect of the IVs was team avoidance ($\beta = -.30$; $p = .00$). Both mediators had a significant direct effect on OCB, for TMX ($\beta = .19$, $p = .00$), and for TI, ($\beta = .35$, $p = .00$). The analysis revealed that a significant total indirect effect for team avoidance on OCB through TMX, $PE = -.09$, $SE = .05$, BC CI: $LL = -.19$, $UL = -.02$, and through Team Identification, $PE = -.21$, $SE = .06$, BC LL: $LL = -.33$, $UL = -.10$. This confirms that TMX and Team Identification mediate the relationship between Team avoidance and OCB. This is also displayed in the Figure 4.2 below where the pathways are provided.

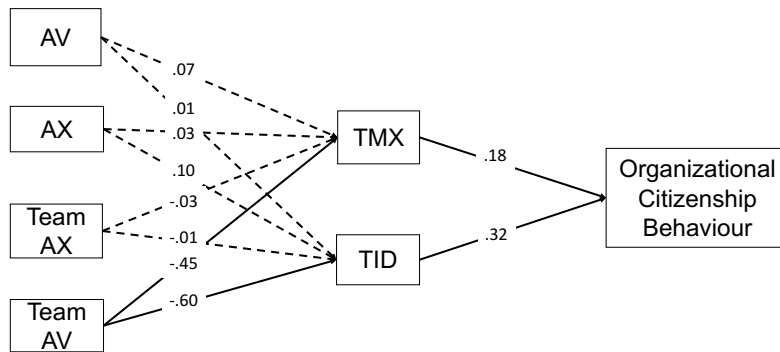


Figure 4.2: Model testing hypothesis that TMX and Team Identification (TI) mediates the relationship between attachment and OCB.

In Figure 4.2 above only team avoidant has a relationship with OCB and that is through TMX and Team Identification. Team avoidant style has a strong and significant relationship with TMX and Team Identification, and both TMX and Team Identification have a significant relationship with OCB. This indicates only a role for team avoidant in influencing OCB, and it is only an indirect effect, and there are the expected negative associations with team avoidant and both TMX and Team Identification. The influence of attachment is in this analysis though the mediators, an indirect effect, with no direct relationship with attachment styles and OCB

4.5.2 Job Satisfaction

For the analysis of job satisfaction as the DV, with both team and individual attachment styles as IVs, and TMX and Team Identification as the mediators only team avoidance had a significant indirect effect as shown in table 19 below. Only team avoidance of the IVs had a significant direct effect ($\beta = -.30$; $p = .00$). Both mediators had significant

effects on OCB: TMX ($\beta = .21$; $p=.00$) and TI ($\beta= .43$, $p=.00$). The indirect effects are given in Table 4.17 below and also displayed in Figure 4.3.

Table 4.17 *Indirect effects on job satisfaction*

	Mediator	Effect	SE	LLCI	ULCI
TMX					
	AV	.01	.02	-.02	.04
	AX	.01	.02	-.03	.04
	Team AV	-.10	.05	-.20	-.04
	Team AX	.01	.02	-.03	.04
Team ID					
	AV	.00	.03	-.05	.05
	AX	.04	.03	-.02	.10
	Team AV	-.26	.06	-.37	-.14
	Team AX	-.01	.03	-.07	.07

Notes. AV, avoidant; AX, anxious.

The analysis revealed that a significant total indirect effect for team avoidance on job satisfaction through TMX, $PE = -.10$, $SE = .02$, BC CI: $LL = -.20$, $UL = -.04$, and through Team Identification, $PE = -.26$, $SE = .06$, BC LL: $LL = -.37$, $UL = -.14$. This confirms that TMX and Team Identification mediate the relationship between team avoidance and job satisfaction. This relationship is also given in Figure 4.3 below.

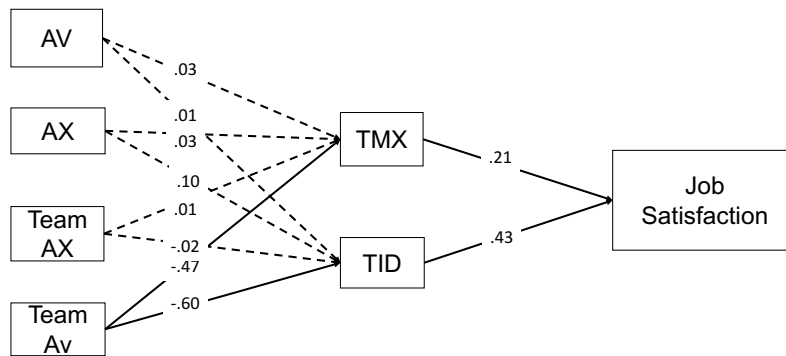


Figure 4.3: Model testing hypothesis that TMX and Team Identification mediates the relationship between attachment and Job satisfaction.

Note. Indirect effect of Team AV through TMX = -.1; 95, %CI = -.2 to -.04 and TID = -.26; 95% CI = -.37 to -.14

In Figure 4.3 above only team avoidant has an indirect relationship with job satisfaction and that is through TMX and Team Identification. Team avoidant style has a strong and significant relationship with TMX and Team Identification, and both TMX and Team Identification have a significant relationship with job satisfaction. This indicates only a role for team avoidant in influencing job satisfaction and it is only an indirect effect, and there are the expected negative associations with team avoidant and both TMX and Team Identification. The influence of attachment is in this analysis though the mediators, an indirect effect, with no direct relationship with attachment styles and job satisfaction.

4.5.3 Self-Rating of Performance

For the analysis of self-rating of performance as the DV, with both team and individual attachment styles as IVs, and TMX and Team Identification as the mediator's only team avoidance had a significant indirect effect - see the appendices for full details. Both IVs had a significant direct effect, team anxiety ($\beta = -.15$; $p = .04$) and team avoidance ($\beta = -.20$, $p = .02$). Both mediators had significant direct effects on OCB: TMX ($\beta = .27$; $p = .00$) and TI ($\beta = .25$, $p = .00$). The indirect effects are given in Table 4.16 below. Only team avoidance had a significant indirect effect thorough both mediators as indicated, with team anxiety having a direct effect in the overall model ($\beta = -.20$; $p = .04$) as did team avoidance ($\beta = .20$; $p = .02$).

Table 4.18 *Indirect effects on self-rated performance*

	Mediator	Effect	SE	LLCI	ULCI
TMX					
	AV	.01	.02	-.03	.04
	AX	.01	.02	-.03	.05
	Team AV	-.13	.05	-.24	-.04
	Team AX	.00	.02	-.04	.05
Team ID					
	AV	.00	.02	-.03	.03
	AX	.02	.02	-.00	.07
	Team AV	-.15	.06	-.26	-.04
	Team AX	-.00	.02	-.05	.04

Notes. AV, avoidant; AX, anxious.

This confirms that TMX and Team Identification mediate the relationship between Team avoidance and self-rating of performance and this is also represented in Figure 4.4 below.

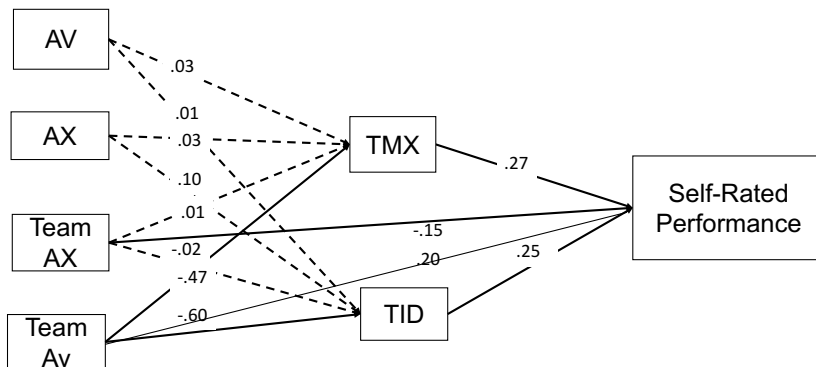


Figure 4.4 Model testing hypothesis that TMX and Team Identification mediates the relationship between attachment and self-rated performance.

Note. Indirect effect of Team AV through TMX = -.13; 95% CI = -.24 to -.04 and TID = -.15; 95 %, CI = -.26 to -.04

In Figure 4.4 above both team avoidant and team anxious styles have a significant direct relationship with self-rated performance, team avoidant style also has an indirect effect through TMX and Team Identification on self-rated performance. Team avoidant style has a strong and significant relationship with TMX and Team Identification, and both TMX and Team Identification have a significant relationship with self-rated performance. This indicates only a role for team avoidant in influencing perception of own performance and it is an indirect effect, and there are the expected negative associations with team avoidant and both TMX and Team Identification, with the direct effect of team anxious. The influence of attachment in this analysis is an effect of both team anxious and team avoidant style on self-

rated performance, and team avoidant having an indirect effect via both mediators on self-rated performance.

4.5.4 Team Performance

For the analysis of team performance as the DV, with both team and individual attachment styles as IVs, and TMX and Team Identification as the mediator's only team avoidance had a significant indirect effect as seen in table 4.16.

Table 4.19 *Indirect effects on team performance*

	Mediator	Effect	SE	LLCI	ULCI
TMX					
	AV	.01	.02	-.03	.05
	AX	.01	.02	-.04	.05
	Team AV	-.15	.05	-.27	-.08
	Team AX	.00	.03	-.05	.06
Team ID					
	AV	.00	.01	-.02	.02
	AX	.01	.01	-.01	.04
	Team AV	-.08	.05	-.18	.01
	Team AX	-.00	.01	-.03	.02

Notes. AV, avoidant; AX, anxious.

Of the IVs only team avoidance had a significant direct effect, ($\beta = -.31$, $p = .002$). Both mediators had significant direct effects on OCB: TMX ($\beta = .27$; $p = .00$) and TI ($\beta = .25$, $p = .00$). The indirect effects are given in Table 4.19, above. Only team avoidance had a significant indirect effect through both TMX as indicated below. This confirms that TMX

mediate the relationship between team avoidance and rating of team performance. This relationship is also presented in Figure 4.5 below.

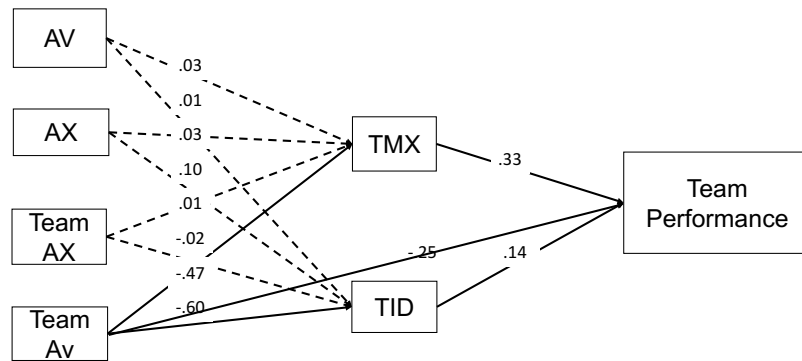


Figure 4.5 Model testing hypothesis that TMX and Team Identification mediates the relationship between attachment and team performance

Note. Indirect effect of Team AV through TMX = $-.15$; 95%, CI = $-.27$ to $-.08$; ; Direct effect of Team AV to TP = $.20$ and Team Ax = $.15$; No mediation for team AV via TI

In Figure 4.5 above, only team avoidant has a direct relationship with team performance, and an indirect effect through TMX and Team Identification. Team avoidant style has a strong and significant relationship with TMX and Team Identification, and both TMX and Team Identification have a significant relationship with team performance. Only team avoidance had a significant indirect effect thorough TMX as indicated below, however, not an indirect effect via team identity. This confirms that TMX mediates the relationship between Team avoidance and rating of team performance but not Team Identification.

4.6 Summary

The research has found significant correlations with the key independent variable global (individual) avoidant style, team anxious and team avoidant style with the mediators TMX and TI and the dependent variables of team performance, self-rating of performance, OCB and job satisfaction. Contrary to expectations the only no significant relationship was found with global (individual) attachment and team performance rating, there were no significant relationships with TMX, TI, individual performance and job satisfaction. With all four styles examined in the regression analysis via mediate there was a direct effect on self-rating of performance from both team anxious and team avoidant and an indirect effect of team avoidant via TMX and TI (Team Identification). There was an direct effect of team avoidant on team performance, however, no indirect effect via TI, and indirect effect of team avoidant via TMX on team performance. In other words, those with a team avoidant style tended to rate their performance higher than others in the team. For OCB there was an only an indirect effect of team avoidant via TMX and TI. Finally, for job satisfaction there was an indirect effect of team avoidant via TMX and TI.

The one key result is that team avoidant style has a consistently significant negative relationship with the research outcome variables of OCB, job satisfaction and the ratings of team performance, however, a positive rating for their own performance. The attachment styles have been shown to have a negative relationship with the team functioning variables of Team Identification and TMX. The research question of what is the role and influence of attachment styles is that from this data, attachment does have a significant influence on team functioning. The summary of the hypotheses not supported is provided Table 4.20 below, and the key theme is that global anxious attachment was only associated with team performance, see Table 4.18.

Table 4.20 *Summary of not supported hypothesis*

Hypothesis		
Hypothesis 2:	Lower levels of self-reported job performance will be associated with: Individual anxious attachment	Not supported
Hypothesis 3	Lower levels of self-reported team performance will be associated with: Individual anxious attachment	Not supported
Hypothesis 4 :	Lower levels of job satisfaction will be associated with: Anxious attachment	Not supported
Hypothesis 5:	Lower levels of reported OCB will be associated with:	
	Anxious attachment	Not supported
	Team anxious attachment	Not Supported
Hypothesis 6:	Lower levels of TMX will be associated with: Anxious attachment	Not supported
Hypothesis 7a:	Team Identification will be negatively related to: Anxious attachment	Not supported

The summary of the supported hypotheses is provided in Table 4.21 which highlights that both avoidant and team as associated, with global anxious negatively associated with team performance, team global anxious associated with all the suggested relationships, except with OCB, and global and team avoidant were related to all the expected factors.

Table 4.21 *Summary of supported hypotheses*

Hypothesis		
Hypothesis 1a:	There is a positive relationship between the individual anxious attachment style and the anxious team attachment style.	Supported
Hypothesis 1b:	There is a positive relationship between the individual avoidant attachment style and the team attachment style	Supported
Hypothesis 2:	Lower levels of self-reported job performance will be associated with:	
	Individual avoidant attachment	Supported
	Team anxious attachment	Supported
	Team avoidant attachment	Supported
Hypothesis 3	Lower levels of self-reported team performance will be associated with:	
	Individual avoidance attachment	Supported
	Team anxious attachment	Supported
	Team avoidant attachment	Supported
Hypothesis 4 :	Lower levels of job satisfaction will be associated with:	
	Avoidant attachment	Supported
	Team anxious attachment	Supported
	Team avoidant attachment satisfaction	Supported
Hypothesis 5:	Lower levels of reported OCB will be associated with:	
	Avoidant attachment	Supported
	Team avoidance attachment	Supported
Hypothesis 6:	Lower levels of TMX will be associated with:	
	Avoidant attachment	Supported
	Team Anxious attachment	Supported
	Team Avoidant attachment	Supported
Hypothesis 7a:	Team Identification will be negatively related to:	
	Avoidant attachment	Supported
	Team Anxious attachment	Supported
	Team Avoidant attachment	Supported

The overall mediation hypotheses with both global and team attachments and TMX and Team Identification as mediators is given in table 4.19. This highlights the direct relationship with team anxious and team avoidant with self-rated performance, and team avoidant with team performance, and team avoidant has a significant indirect, mediation, effect with all the outcome variables except there was no mediation for team avoidant via Team Identification for team performance. None of the other global or team attachment had an indirect effect on the outcome variable via TMX and Team Identification.

Table 4.22 *Summary of mediation hypotheses*

Hypothesis 8: Team Identification and TMX will mediate the relationship between individual and, team anxious and avoidant styles and:

OCB	Partial – indirect effect of team avoidant via TMX and TI
Job satisfaction	Partial –indirect effect of only team avoidant via TMX and TI
Self-rated performance	Partial – indirect effect of team avoidant via both TMX and TI, direct effect of team anxious and avoidant
Team performance	Partial – indirect effect of team avoidant via TMX, direct effect of team avoidant

5. Discussion

5.1 Introduction

The research found that adult attachment style has an influence on the perception of the quality of the team interactions and the extent to which an individual identifies with their team. The overall research aim of this study was to investigate the relationship, or pathways, between adult attachment styles, TMX, Team Identification and performance related measures. The research proposed that attachment styles have an influence via more complex pathways, which are termed direct and indirect effects, on employee performance outcomes, i.e. through a set of intervening (i.e. mediating) variables: TMX and Team Identification. Data were collected from 360 individuals working in teams in the UK. Overall, support was found for the majority of the hypotheses and this support for the role of attachment in teams and organisations with attachment styles correlating with TMX, Team Identification, OCB, and ratings of performance and in the multiple regression analysis avoidant attachment was an important predictor either directly or indirectly, with team anxious only influencing self-rated performance with a direct effect. Overall, team avoidant attachment was found to be the most significant predictor in the mediation analysis for the mediators and the outcome variables using regression analysis.

The current research therefore has achieved its aims by the exploring and the insight into the gaps in the literature: The relationship between global and team attachment was confirmed, the application of attachment into a workplace setting, and use of the team attachment instrument and the relationship with attachment and teams was confirmed. It has also contributed to the need for attachment theory being further applied to the workplace, and specifically the need for work into the role of mediators of the linkages between attachment and outcomes (e.g. Paetzold, 2015), which given the complexity and interconnectedness of

organisational attitudes, perceptions and behaviours, there is a need for more mediation models to explain important pathways between attachment and key outcomes (Paetzold, 2015; Mikulincer & Shaver, 2016).

The findings do need to be discussed in relation to the sample as the sample had a larger proportion of female respondents and given the nature of the survey, care may need to be taken with regard to the generalisability of the findings as issues such as organisational culture, industry sectors, interaction with leadership were not explored. However, this current work has contributed to a gap in attachment literature and research, and has demonstrated how adult attachment may influence team variables and organisational outcomes, and the path or route that this process may take. This opens a new and different approach to the study of individual differences in teams and suggests that adult attachment models may bring useful insight to understanding teams and organisations. The research further supports the application of social-psychological approaches to adult attachment theory by showing support for important applications of attachment beyond only close personal relationships. Specifically, the current research gives insight into the individual factors that processes that modern organisations require such as cooperative teamwork, increased interdependence, prosocial behaviours and positive and high quality relationships.

In summary, the central finding from this current research was that adult global and team attachment styles are associated with a range of team functioning, performance and context performance measures. The team avoidant attachment was most consistently and strongly associated with the study's dependent and mediating variables. When all the attachment styles are analysed simultaneously to determine the unique effects of each attachment style, team avoidance style was the most useful in consistently understanding both TMX and Team Identification, job satisfaction, OCB, performance measures and the pathways between these. There was also a strong, mediational relationship for team

avoidance in understanding the measures of OCB, job satisfaction and the two performance ratings.

The findings suggest that those with avoidant team attachment styles felt that the experience of team was negative with lower TMX reported for these individuals, and lower Team Identification. This finding for TMX is important for team functioning as this is about the effectiveness of working relationships between team members, as TMX is an “individual member’s perception of his or her exchange relationship with the peer group as a whole” (Seers, 1989, p. 119) and the individuals perception of the team. A high-quality TMX is useful to team functioning as it means that team members have good social and task relationships, lower conflict and they work to benefit co-workers. The Team Identification link supports this with team avoidance strongly linked to lower levels of Team Identification, except for team performance where the mediational relationship was only through TMX. Overall, the research adds to, and supports the attachment literature by suggesting that an avoidant team attachment style may emphasise a lack of trust, and discomfort with intimacy and dependency in teams. The anxious attachment style describes a desire to be close, with anxiety about being rejected, and an awareness that the individual desires intimacy to a degree greater than most people (e.g., Crowell & Treboux, 1995) and it was found to have a more limited role which will be discussed below. The aims of the research were therefore achieved by showing the pathways by which attachment styles may influence teams and key organisational outcomes, and develops the application of attachment to organisations. The study also focused on current workplace teams, rather than the use of student samples, which has been used in much of the group and team attachment research.

While the focus of the research was around the interactions of attachment, TMX, Team Identification and outcome variables to build on the existing attachment theory paradigm in the area, other variables could be seen as potentially impacting on key related

outcomes and themes and issues such as the impact on how these findings may be generalised. Issues such as conflict within the team were not explored as they variables of TMX and Team Identification were selected as they capture a broad cross-section of team functioning. However, positive TMX may be interpreted as a positive team experience free of negative conflict as TMX was defined above as the team members' perceptions of their relationships with other members in terms of the reciprocal contribution of ideas, feedback and assistance (Seers, 1989). Conflict in teams is a wide ranging issues and includes relationship and task issues (e.g. Levi, 2016), and may merit a separate focused piece of research as they are beyond the scope of the current research question. The current findings have added useful insights and are consistent with the attachment theory and team literature. However, there are issues that need considering and their potential impact on the findings. This current study did not explore the significance of industry sector and while we have gained some useful insights into attachment and teams, issues such as industry and organisation context may add a further dimension and enhance the wider application of these current findings. For example, some industries may be more threatening or supportive than others, and so the extent to which these current findings can be generalised and extended must be taken with care.

External factors such as the family or national and organisational culture may also be an influence on the felt security of the individual. The support a person receives outside the organisation may impact on the feeling of security in the team or organisation. It has also been argued that attachment has been not largely affected by national cultural factors (e.g. Gillath, et al., 2016) and that attachment measures have been used across differing cultures with similar findings (Mikulincer & Shaver, 2016) and therefore it could be implied that context may not have as strong an influence. The organisational context is a related factor that may impact on the findings, for example, organisations with a high degrees of stress such

as an unjust work situation or high levels of discrimination may counter the effects of secure attachment. Previous attachment studies have varied from Israeli military situations to American workplaces, and these context issues may influence findings as they reflect different stressful situations. The type of work may also place a role with jobs in call centres having a different stress than those in other jobs. In this sample there was a large percentage of respondents with a post graduate degree and this may reflect a different context or pattern of work. Leadership may have a role as an attachment figure and in influencing the team as leadership has been shown to affect such exchange relationship (Mikulincer & Shaver, 2016).

There are several issues other personal issues such as stress, role conflict, conflicting personal goals are issues that have been shown to potentially influence key organisational outcomes (e.g. Nelson & Quick, 1991) and attachment styles have been linked to issues stress (e.g. Simmons et al., 2009; Quick, 1999), with leadership linked both to attachment, and to key outcomes and teams (e.g. Popper & Mayseless, 2003). These factors may possibly impact on this current research and potentially limit the extent to which we can generalise these findings, and highlight the need for further work in the area. However, the research question was a focus on teams and attachment in response to a gap in the literature and has added to the role of attachment in groups and teams. The gap that this research addressed to understand the relationship between teams, attachment and key outcomes. Existing work in attachment has considered issues such as leadership, stress, followers and work-family issues (e.g. Quick, et al., 2010) and the gap was a team focused research, and with a work oriented sample. These are all interrelated issues and further work may be needed to bring the various threads closer with both work and non-work issues such as family issues included in the model. Overall, the current research did not explore these issues as the focus was on the team and the individual and further studies could explicitly develop these factors, however, there is also a pragmatic issue in the amount of data that research may collect in organisational

settings and respondent fatigue. However, the research has added useful insights in to the attachment theory and team research and suggested useful avenues for future work.

The current research sample is skewed in terms of gender and the issue of gender was explored in this study to determine any gender differences, and none were found. Research in the area of attachment has considered potential gender differences in attachment and largely found and suggested no reliable differences between men and woman (e.g. Beckes & Simpson, 2009). However, a meta-analysis study by Del Giudice (2011) found that average effect sizes for gender differences were weak and there was only some small variability in terms of certain geographical regions. Overall, it is suggested that the skew sample in this current research may not substantially influence the findings and no statistical differences were found for this, however, future work may again investigate these issue to ensure the consistency and generalisability of the findings from this study.

The details and implications of all these relationships will be further explored below. The chapter firstly gives an overview of the direct relationships for global (individual) attachment styles and then for team attachment styles. The consequences of this research is that the deeper and more unconscious aspects of team members need to be considered in team dynamics and therefore in the leadership and management of teams, and an understanding of the emotional life of groups needs to be considered, and attachment provides a potentially rich and useful tool for this task.

5.2 Overview

Theoretically this research has made a number of new insights and contributions to the understanding of the nature and construct of adult attachment in organisations with the specific focus of team functioning in the workplace. It has also extended the research of attachment into teams and shown the importance of a team attachment style measure and the

strong influence of team avoidant attachment in team functioning and informs the individual's behaviour in a team and key organisational outcomes. It also gives support to attachment theory as an alternative or to complement our understanding of organisational behaviour than the dominant paradigms in individual differences such as personality based views.

5.3 Individual (Global) Attachment and Team Attachment

The first issue the research tested was the relationship between individual (global or ECR) and team attachment styles. In the research, statistically significant but small to moderate associations were found between the ECR individual, or global, attachment scales and the team attachment. This statistically, significant relationship between the two concepts led to the acceptance of the proposed hypotheses and it could be argued that the attachment scales measure different attachments, so attachment is relationship specific. There are two themes leading from these results. Firstly, there was some overlap between the constructs which is seen to be acceptable as this would be expected in variables such as these, however, the issue of developing context specific scales is discussed below as a consequence. This also supports the idea of attachment as dimensions not as categories. The issue was that each attachment style contributed to the respective scale as hypothesised. This gives divergent validity as this was to be expected. However, the two scales firstly contributed 16% of the variance to team avoidance and then 25% of the variance to team anxiety. The conclusion drawn from this is that there is a direct relationship between global and team attachment as expected, however, the scale and magnitude of the association indicate that meaningfully they are two are different concepts. There is a relationship, however, the statistical analysis seems to suggest two different concepts in line with literature (Gillath, et al., 2016).

It could possibly be argued that the team attachment is derived from an individual's representation of their teams which is a reflection of their personal experiences and interaction with their team. This team experience is what shapes their internal working model of the team and if the team creates a secure base, for instance by consistently being emotional available and providing support, in the case of the avoidant attachment person, by consistently supporting and allowing them the space they need over the long term this may alter their internal working model. This calls for a longer term intervention and not a 'one size fits all' approach to team building. It is not useful or suggested to select on the basis of attachment, only that we more fully understand teams and the behaviour of those in teams. This has implications for measurement as in using the attachment concept in organisations as the measurement needs to ensure that the specific context is being considered. The context also influences the interactions which may not be fully understood as it is both the team and the individual attachment style that may need to be considered. So, for example, in a team development activity, both the individual attachment style and the team attachment style may need to be examined, and possibly attachment to key figures such as the leader, to determine the basis of the felt security or lack thereof.

A key finding that emerged in the research was the strong role of the team avoidant attachment style. At first, the notion of avoidant attachment seems to go against the need to belong (e.g., Baumeister & Leary, 1995; Deci & Ryan, 2014). However, it is important to see that avoidant attachment, in part, is a defensive process, as despite a need to belong, they have learnt to inhibit this need. More specifically, these individuals have learnt that by avoiding intimacy or closeness they are protected against potential rejection and harm. It has been shown that avoidant attachment individuals, despite their claim of not being sensitive to others' evaluations, are indeed sensitive and they do care about social connections (Boccatto & Capozza, 2011).

The current research therefore, does lend support to the suggestion made by Collins and Read (1994) who questioned the assumption of one attachment style and the notion of it as a stable, dispositional variable. They proposed that multiple mental models develop in response to personal experiences in different contexts and they conceptualised adult attachment styles as a network of interconnected models organised with a default hierarchy. However, whilst this research does not suggest a hierarchy it does support the theory of multiple attachments and how these may vary based on context (Baldwin et al., 1996; Lopez & Brennan, 2000). The idea of a general mode put forward by Collins and Read (1994) suggests a higher order attachment style could be applied across a wide range of situations and relationships but may not describe any one very well. Lower down the hierarchy, more relationship specific models exist corresponding to specific contexts such as teams or partner relationships. Although not directly considered by this research design and study, it may be suggested that as Bartholomew and Horowitz (1991), and Cozzarelli, Hoekstra and Bylsma (2000) propose, individuals may not fit any one attachment style exclusively and may hold mixed attachments across time and also within and across relationships. This current research data suggested a global attachment, and a separate and more specific attachment to teams which may be influenced from the global attachment style (Field, 1996; Gillath, Karantzas, & Fraley, 2016). The implication to be drawn out is that perhaps it is possible to have more or less secure dyadic attachments, while having more or less secure team attachments as Smith et al. (1999) suggested. Attachment is viewed as a relationship that develops between two or more organisms or objects as they interact and develop a secure or possibly an insecure relationship and teams can act as an attachment figure, and as a secure base, and the team may act as a source of security. Understanding the underlying team dynamics may assist in effective team building and related activities. In this, we may also look at the team leader's attachment style and his or her interaction with the team and this promises a further area of

research and work. Attachment may be seen not a trait based view rather an interactional approach to relationships, and it may include the influence of the context such as the leader or as this current study suggests, the team itself. Each attachment figure or the team experience itself, may possibly influence the working model and the behavioural manifestations of attachment and therefore have related yet differing attachment styles for different relationships. Also, the salience of the attachment figure or object may be important so this would differ in strength. For example, a leader in the workplace may be a larger source of security than a team, therefore the attachment relationship may differ in its salience. It is these issues that future studies will need to consider. The practical issue is that when exploring team related research questions the measurement is more useful when utilising a team attachment measure. From the current research it does appear that scales or measures that are specific to that domain will have greater predictive power. Therefore, specific team attachment scales to address team related issues, and individual scales such as ECR to address person level constructs and concerns may be more useful in both practice and future work. Furthermore, these two attachment style orientations may interact with each other and produce differing relationships depending on the matching of these elements and here the use of methods such as network analysis may be a useful tool.

5.4 Attachment and Performance

The hypotheses that individual attachment style would be associated with lower levels of performance was supported for the avoidant attachment style which was consistently negatively related with both self-rating of individual performance and the rating of the team's performance. However, individual (global) anxious attachment has only a significant negative correlation with team performance and not with self-ratings of performance. This is possibly due to that the that the anxiously attached need to protect themselves and as they are

inconsistent or unable give a rating or possibly the outcome measures were not sufficiently interpersonal in orientation, as when analysed together in the regression analysis with avoidance, anxiety did not have an association with either rating of the two ratings of performance. It could be that anxious and avoidance predict difference types of performance and with the anxious attachment focused on the relationship, different measures are needed for each attachment style. The avoidance oriented employee will see the team as a distraction, hence the negative rating with their performance superior, and given that they may tend to be over involved in work with possible disruption to home life, and anxiously attached more concerned with the socio-emotional aspects of work. Further work into the impact of this work orientation by the avoidance style into family life may be a useful area for future work.

The amount of variance in the two performance measures explained by both individual attachment styles was 2% of the variance in self-rating of performance and 4% of the variance in the individuals rating of team performance, and although small to moderate, this indicates some influence for attachment and is contrast to work such as Simmons et al. (2009) who suggests performance is only influenced by relationships between workers and supervisors. Both team attachment styles were significant in explaining both self-rating of individual performance and rating of team performance. The negative influence of team anxiety on self-rating of performance could be a reflection of the self-doubt around being part of the team and that others tend to undervalue their performance. Both factors showed significant negative correlations with the two performance ratings. However, the influence of the team attachment variables showed that even with the inclusion of the control variables, the team attachment styles explained an extra 22% of the variance in the individuals rating of team performance out of total of 26%. Team avoidant style was the important predictor in this relationship. For self-rating of performance, team attachment explained an extra 4% in

the variance of self-rating of performance of the overall 6%. Attachment styles were therefore strongly associated with the self-performance and team performance ratings, with team avoidance individuals indicating a positive rating for their own performance and a lower rating for the team. Attachment research has shown that attachment does influence these relationships (e.g., Game, 2008). The implication of this current research is that support for work such as that of Hazan and Shaver (1990), Harms (2011), Neustadt et al. (2011), and more recent work that shows performance related decisions, such as making unethical workplace decisions, are more associated with avoidant attachment style (Chopik, 2015) could be possibly seen. This has implications for areas such perceptions of reward and motivation where unseen attachment issues may influence perceptions of team work and HR strategies geared to manage these areas.

The results also show that team performance has a strong, direct relationship with team avoidance attachment, with the team anxious style linked to individual performance. It is clear that the role of team avoidant attachment is both statistically and meaningfully the key issue in understanding team performance and unlike OCB and Job Satisfaction it had both a direct effect on the perceptions of team performance, and an influence (indirect effect) via TMX but not via Team Identification possibly due to the stronger influence via TMX given the team focus, however, unlike the other dependent variables in the research there was no mediational influence through Team Identification. This key theme that emerges is the important role for team avoidant style in the team context. The current research supports the notion that those with a team avoidant attachment style may be more dissatisfied with team members, prefer to work alone, and have a poor work/life balance. This is in part because they may be drawn to work rather than any social interactions, as they wish to turn off and suppress the attachment system. As a result, they therefore feel that the team is less important to them (Smith et al., 1999). Overall for both team and individual performance the

team avoidant style has been shown to have an important influence on team functioning. This has implications for interventions such as team development, team management and coaching as it means that attachment styles has a powerful and unseen influence on team oriented interventions and activities in groups. The implication is that in interventions from managers or facilitators, they may need to be aware that developing self-awareness is potentially a longer term process rather than an one off team building event. For instance, the more avoidantly attached will need a longer time span to deal with the issue of sharing and developing self-awareness. The knowledge of attachment styles will assist a facilitator understand the narratives used by the various team members. A team leader or coach will also need to create a safe environment for those with insecure attachments to deal with their pattern of behaviour and the deep seated causes of this. A secure base is on part a team environment that is positive and consistently supportive. For the anxious attachment style leaders and others need to be aware that their ongoing seeking out of approval and reassurance may be ever be successful in their eyes and their self-doubt hinders this, therefore those with this style will have an ongoing seeking for reassurance and will their focus may tend to be on this and themselves, and not team tasks or performance. For the avoidant attached they tend to have a self-limiting mind-set and have unrealistic views of social situations and be socially inhibited and thus may tend to avoid activity and interactions, which in the modern world of interdependence between workers and the strong team oriented nature of work, this will potentially also have an impact on performance. The relationship oriented world of modern work means that attachment offers a useful and deeper insight into the nature of the relationships between people in organisations. The development of a team rather than a global attachment also implies that the team can act as a source of security and specific attention to team attachment may be more beneficial, than a focus on global attachment style. Perceptions of team contributions have been shown to differ depending on

the style and this will be useful in understanding the relative efforts of team members, as their perceptions of equity may be shaped by the attachment style and not the other team members contributions.

5.5 Organisational Citizenship Behaviour

The research found some support for the hypothesis that anxious attachment or avoidant attachment styles would predict reluctance in carrying out OCB. Specifically, that those with a high avoidance style will be associated with lower organisational citizenship behaviours, and similarly, those with a high anxiety style will be associated with lower organisational citizenship behaviours. There were statistically, significant relationships between team avoidance and OCB, and individual (global) avoidance and OCB; however, neither team anxiety nor individual anxious attachment were associated with OCB. The lack of a significant finding for both the individual and team anxious attachment goes against the prediction that anxious attachment for both team and individual would be predictive of OCB. For example, it has been highlighted that anxious persons are, despite their insecurity concerning how others evaluate them, characterised by a strong need to work with others (Mikulincer, 1998). However, there was a strong significant finding for both team and global attachment, with team avoidant attachment the stronger predictor of OCB and there was a significant indirect (mediation) relationship through TMX and Team Identification.

Although significant relationships were found for direct effect of individual avoidance this was with 4-5% of the variance explained. However, the evidence for the indirect relationship with both TMX and Team Identification as mediators supports the idea of a model for attachment where the indirect relationships of attachment are more complex, realistic and practical for both research and practitioners. The mediation model allows for the path of the relationships to be examined and to find and explore appropriate organisational

and individual interventions. Team attachment has an important role to play in influencing team related process and task variables. However, the issue is not of a trait like approach, where a trait influences an outcome, rather a process of relationships between key variables. This is what the mediation approach brings to the question of how attachment influences team and organisational variables and adds to similar findings such as Farmer, Van Dyne and Kamdar. (2013) and Little et al. (2011). The implication is that deeper and unconscious influences are important and the perceptions or people, of which they may be unaware, about the nature of interactions with others potentially has a large role to play and a generic one size fits all approach to extra role behaviour, pro-social behaviour and engagement may be influenced not by HR strategy and policy, rather an individual's attachment style.

The current research also develops and adds to previous work that has suggested both attachment styles, avoidance and anxiety attachment, were found to negatively correlate to OCB (e.g., Desivilya, Sabag & Ashton, 2006; Richards & Schats, 2011) and negatively linked to employees being helpful (e.g., Geller & Bamberger, 2009; Le Roy & Rioux, 2013). The current research only found limited support for a direct relationship, however, there was support for an indirect link with the avoidant style via TMX and Team Identification. Previous studies have found both attachment anxiety and avoidance were negatively related to helping behaviours directed at co-workers, while those low on anxiety and avoidance showed significantly higher tendencies towards OCB (Richards & Schat, 2011). There is evidence of some correlational links between OCB and attachment, this current research suggests that the lack of strong direct links between OCB and attachment is possibly due to the concepts not be linked directly. OCB is about general helping in the organisation and although it was that expected anxious attachment to be associated with OCB as it provided an opportunity to receive feedback and be with people, OCB was not found to be directly linked to team functioning. The negative relationship between OCB and avoidance attachment were

as expected and the results supported the idea that avoidant individuals tend to be detached and personally uninvolved. Some studies have also found a lack of support for the direct role of attachment (e.g., Little et al., 2011; Pavalache-Ilie & Rioux, 2013) with more support for an indirect effect. It is clear that mediation analysis revealed a more significant and complex explanation of the antecedents of OCB. Specifically, the current research showed that TMX and Team Identification mediate the relationship between team avoidance and OCB. The current research's findings then do support the hypotheses, in that antecedents of OCB in organisations may depend on individual schemas concerning the nature of interpersonal relationships as demonstrated in attachment styles. Individual schema's play a role in the perception of prosocial and related attitudes to others in organisations and these need to be further exploration. Attachment influences the engagement with others and is a schema about the nature of relationships and will need to be influenced and shaped, and it could be argued that attachment is the basis for engagement. Engagement is perhaps about the nature of attachment and therefore organisational engagement efforts may need to be informed by the nature of individuals attachment.

5.6 Job Satisfaction

The results show that Job Satisfaction is correlated with global avoidant styles and both team anxious and avoidant. However, when the research analysed all the attachment styles together in the regression analysis, only team avoidance had a significant association with Job Satisfaction, and that TMX and Team Identification in line with the research question what is the influence of attachment style and what is the path this follows.

The implications of this suggest that those with insecure attachment strategies may tend to report lower levels of Job Satisfaction than adults with secure attachment style as suggested (e.g., Hazan & Shaver, 1990; Krausz, Bizman & Braslavsky, 2001; Raskin,

Kummel, & Bannister, 1998; Schirmer & Lopez, 2001; Vasquez, Durik, & Hyde, 2002) and specifically team attachments may play a role. This current research then confirms the suggestion that Job Satisfaction would be influenced by adult attachment styles as the attachment literature in the area has suggested. Team avoidant individuals display this and they may also show dissatisfaction and conflicts with colleagues, dissatisfaction with task variety as well as with the number of working hours and the experience of their own work as boring. Indeed, the current research did find small associations between Job Satisfaction and team avoidant, team anxious and individual avoidant attachment, however, not for individual anxious attachment. The relationship was significant despite its rather small effect size, as both control and attachment variables explained between 6% and 11% of the variance in the outcome variables, with the strongest variable being team avoidant attachment which still explained only a limited amount of variance in job satisfaction. The conclusion is, however, that this research supports the idea of a relationship of attachment with job satisfaction as suggested (e.g., Richard & Schats, 2011; Hazen & Shaver, 1990).

The implications of this are that organisational strategies to increase factors such as OCB, engagement, commitment, and related areas need to be aware the enhance insecurity, may create a resistance or defensive behaviours as the insecure attachment individual will respond with differing responses, for example the avoidant styles will possibly find this intrusive and not relevant to their job. Anxious attachment individuals, plagued with self-doubt possibly ruminate a great deal on this and whether it would be consistent or real.

Organisational level issues may be affected by attachment and the role of the individual needs to be understood in these processes. Attachment potentially has a role in shaping important relationships and relationship factors such as effective team functioning and impact on job satisfaction. Rational programmes to address the issues such as job satisfaction need to understand how individual relationships may affect individual and

organisational level issues, and that there is an “arational” dimension to individuals, which may appear irrational yet is based on deep emotional factors. These then impact on relationships and need to be understood so to manage the relationships more effectively. The current research found a strong role for attachment and relationships in teams, specifically identification with the team and the quality of the relationship, and how this impacts on key organisational outcomes. The role of the individual is essential in the understanding of how all relationships and attachments function in organisations.

5.7 Team Member Exchange

Attachment styles were found to be a predictor of TMX, with global (ECR) avoidant style and both team anxious and team avoidant styles associated with TMX, and was also found to be a mediator for the relationship between team avoidant style and all four dependent variables in the research. This adds to the team and TMX literature and the need to explore the antecedents of TMX, and also specifically the deeper predictors as noted in the TMX literature (e.g., Wang, Li, Wu, & Liu, 2014). In addition, the current research also confirmed the propositions made by a meta-analysis of TMX (Banks et al., 2014) which suggested links between performance, job satisfaction and work outcomes and noted the need for more research into the antecedents of TMX. The use of attachment in this research has therefore provided insights into the factors that may influence TMX, understanding the process by which TMX develops and is experienced and a more comprehensive dynamic understanding of this process. The strong influence of team avoidant style negatively associated with TMX is consistent with the findings of attachment studies in other contexts. Team avoidant attachment has been shown to be a key influence on TMX and a useful predictor which meets the need in the TMX literature. It also adds to the nature of the relationships in team functioning and that both team variables, TMX and Team Identification,

were strongly influenced by team avoidant relationships is a theoretically and practically significant finding.

The implications for understanding the nature of team dynamics is that all involved in and with teams need to develop an understanding of the very subtle and below awareness forces that may shape the individual in the team and the team itself, the emotional life of a team shaped by individual attachments may cause a move away from the required tasks. This has potentially an impact on costs and efficiency as ineffective team dynamics may result in a need for high coordination, poor information exchange which may impact on issues such as innovation and lower engagement of the team. Attachment provided a useful tool to help understanding the team from an individual view and how the unconscious shapes the perceptions of team members and resulting outcomes of this.

5.8 Team Identification

The current research has indicated that attachment styles have an important influence on Team Identification. The results show that a higher team avoidant style was associated with lower levels of Team Identification. Team Identification was also a mediator in the relationship between attachment and the dependent variables excluding team performance where only TMX was a mediator. It is noted that there was a direct effect between team performance and team avoidance and no mediating role for Team Identification. However, team avoidant attachment was significantly negatively associated with TMX. As predicted, this research found that those with a team avoidant style do not accept or value closeness or dependence on teams. The current research therefore extends the attachment into identification and the work team area. It was found that those with an avoidant attachment tendency have a basic tendency not to value social relationships and this is reflected in the interactions with their work teams (e.g., Shaver & Hazan, 1993). However, the lack of strong

significant findings for anxiety was contrary to the expectations of this research. Nevertheless, this is consistent with some of the literature in organisational attachment research which has seen a stronger role for avoidant attachment (e.g., Littman-Ovadia et al., 2013).

The findings and focus on team avoidant attachment style has implications for practice as these people may prefer to work alone. They may be less likely to identify with the group, may see themselves as autonomous and may not see a need to be close to the team. They can therefore find the widely used team development strategies to not be useful. This has implications for team building and development. The use of popular tools such as Belbin's team roles or MBTI in understanding team dynamics may not be seen to be of any real value by the avoidant attachment style person as they do not wish to develop a stronger Team Identification or closeness which is the intended aim of the process. The use of an attachment framework can therefore add to team development interventions and lead to a deeper understanding of the team dynamics so that a reluctance to take part in the team building activity can be better understood and compensated for. Possibly only the anxious attachment will benefit from such activities? In addition, for those facilitating or coaching teams the attachment framework gives an understanding of the narratives being used by the team members. This will be useful to understand the nature of identification with teams and strategies can be developed from this knowledge. Drawing on work such as that by Drake (2009) and De Haan (2012b) it is suggested that team members' narratives can be appreciated in terms of their internal coherence, and that this will enable a facilitator or coach to better appreciate the wider narrative patterns in the team member's work and life, thereby making their goals more realisable. In this process, as Drake (2009) suggests, the level of coherence in the team member's stories, about their past, present and future may reflect attachment experience and the way in which they interact with others in the team. This, in turn, allows

the team leader or organisation to better understand the nature of their teams and make them more successful. This may also provide insights into issues such as conflict as there is a deeper understanding of the differing approaches to working in teams and provide insights into issues such as relationship conflict and team processes. Individuals desire to join and have an engagement with the team is shaped in part by the attachment style and this provides a useful insight into how and why individuals interact with teams.

5.9 The Central Role of Team Avoidant Attachment

A key finding was the central role for the team avoidant style in this current research. This style has been found to be less likely to seek out social support because these people naturally feel more comfortable when they keep themselves distant from others (Florian, Mikulincer, & Bucholtz, 1995). These current findings develop attachment theory and groups, which suggests that even with group cohesion avoidant attachment team members do not benefit from the support from the team (e.g. Smith et al., 1999). However, it could be argued that this tendency does not necessarily indicate a lack of desire for warmth and support from others. It could be that an avoidant individual's persistent tendency to avoid seeking social support when needed eventually serves to increase the desired level of warmth from others to meet consistently unmet needs (e.g., Byington, 2013). It thought that possibly a fear of closeness merely complicates relationships with others on whom one would rely on for addressing needs for warmth. The conclusion from this argument is that though uncomfortable, offering closeness and being interdependent, it is possible that ultimately higher levels of warmth from others are actually likely to be positively received by persons with an avoidant relational orientation. It could be that avoidant styles are engaging in avoidance as a protection and that, ironically, avoidant employees also prefer relatively high levels of warmth from and positive interaction with co-workers (e.g., Byington, 2013). If

they display avoidant behaviours as a defence mechanism, they are adopting this style in order to protect themselves from the possibility of rejection. The indication is that avoidant individuals prefer to be alone. It was also found that attachment style people who report themselves as being lonely, are likely to be characterized as hostile and moderately anxious by peers (Kobak & Sceery, 1988). Furthermore, they are prone to depression and loneliness from social causes (Bartholomew, 1990). Avoidant individuals may also be more susceptible to emotions that are typically managed through social support (Kobak & Sceery, 1988). Additionally, it could be suggested that a subgroup of these individuals actually puts a very high value on acceptance from others, though they avoid close relationships out of a fear of rejection (Bartholomew, 1990). Overall, as a result of their attachment history, avoidant persons may ultimately have greater difficulty in establishing the kinds of bonds with others that would greatly contribute to their wellbeing. This then has implications for team development and there is a strong need to provide an environment where we can challenge this working model and create a secure base so that this avoidant attachment individual can find a more positive role in the team.

The avoidant attachment individual has important differences from anxious attachment individuals. Avoidant attachment individuals tend to evaluate themselves as lower in how attractive their colleagues judge them to be (Hazan & Shaver, 1990; Lanciano & Zammuner, 2014). Avoidant individuals also exhibit more conflict with co-workers, more relational difficulties outside of work (Hardy & Barkham, 1994), stronger intentions to leave their job and their organisation (Mikulincer & Shaver, 2007c), lower levels of instrumental and emotional support-seeking, and greater use of surface acting as a means of regulating emotional displays at work (Richards & Schat, 2011). As with recent research avoidant attachment styles explained workers' Job Satisfaction (Lanciano & Zammuner, 2014). In this current research, a central finding was that the team avoidant style has a strong direct and

indirect, negative influence on key team variables such as TMX and Team Identification. In the team context, where the successful functioning of the team requires a need for interdependence and sharing, avoidant attachment individuals may engage in defensive strategies such as surface acting and distancing. In order to counter balance this, team development facilitators can try create a secure base of ‘an island of security’ (e.g., Littman-Ovadia, et al., 2013) which is the basis for a secure base. It is hoped that this will allow the avoidant attachment team member to feel able to resist their tendency to follow avoidance strategies and allow themselves to become as equally interdependent as the other more securely attached members of the team. Attachment theory suggests that a secure base is established by the experiences and interactions with others, and so in the team context, exposure to warm, consistent and reliable interactions may change the avoidant team member, and indeed the anxiously attached as well, and their previous insecure oriented expectations both of close adults and of themselves.

The issue is how to create the conditions for the avoidant attached team member to be secure and then enable them to function within the team, or how do organisations make a secure base attractive to the avoidant so that they learn that they can depend on others? A focus secure base may work for the anxiously attached but possibly not for avoidant individuals, who may find that this is a further reason to withdraw. Anxious style individuals may also be more malleable and changeable to secure than those of the avoidant style. Individuals who circumvent closeness by withdrawing, are most unlikely to experience positive relationships that lead to changes in their attachment style. Many of the team development interventions are based on Interdependence. However, avoidant adults tend to be uncomfortable being close others and find it difficult to trust others completely and difficult to allow themselves to depend on others. One approach could be the development of mindfulness using coaching methods (Drake, 2009), where the coaching is focused on the

development of a person being mindful and developing an openness to and awareness of what is actually going on in interpersonal exchanges. Attachment theory could also be used to match the coach and those being coached and some related work has been conducted with mentors (Banerjee-Batist, 2014; Germain, 2011). However, it may be that some types of work may actually value and need the behaviours that avoidant attachment may bring such as self-reliance, independence, and the ability to work without proximal social support. The focus on insecure attachment as an undesirable style may be not well founded and that insecure styles may be useful in certain situations and contexts. Attachment styles may not necessarily be dysfunctional in all contexts.

5.10 Attachment and Teams

The suggestion that adult attachment has an important influence on team functioning has been evidenced by this current research. The results indicated that when a team member is highly avoidant then this has potentially a negative influence particular on teams, and to both TMX and Team Identification and that attachment has an influence on team factors. To fully understand these pathways of influence, a mediation analysis effectively displays the focus on the interconnections between related variables to understand the influence of attachment in teams. Until now, there has been a dominant focus which has held attachment styles to be traits and this focus has led to a relative neglect of the way in which current relationship patterns continue to influence personality and internal working models throughout our lives (e.g., Hazan & Shaver, 1987; 1990; Kobak, 1994; Levitt, 2005; Lewis, 1997). The implication is that provide a way of thinking about how adult attachment relationships develop, the functions that they serve, and security of relationships, which is called the secure base and allows for exploration. This current research argues and supports this relationship focus and adds or develops the notion that attachment is a process, and not a

trait or style only. The relationship itself is a source of influence and the interaction of the attachment style with others is important. Considering these relational influences will be more useful for both practice and theory in applying attachment theory to the workplace.

This current research has also suggested that the teams themselves can act as attachment figures. It therefore follows, that the experience of belonging to a securely functioning team in the workplace might lead an individual to revise their internal working models of relationships and their attachment style. Indeed, Bowlby (1988) did call for interventions to modify an individual's internal working models, and evidence suggests that positive encounters between individuals can make progress in this area (Hardy & Barkham, 1994; Lopez, 2003). The attachment figure provides protection and emotional security and can bring about variation in attachment orientations (La Guardia et al., 2000) and it is suggested that successful teams may help adults revise their internal models of work relationships by demonstrating and providing secure behaviour patterns. This is particularly true when the team is responsive to an individual team member's need for security and protection. In many organisations, a team is a crucial representative and for employees one's team often embodies the organisation. When there is a sense of trust within the team, individuals may be more responsive to the context-shaping interpretive roles that teams could play, which is to develop a secure base. In the team, it is seen that secure people who are low in anxiety and avoidance, can work well both autonomously and with others as appropriate to the situation. They are easily able to adapt between the two circumstances. If the team or team leader can recognise, encourage, and reward these behaviours, then the secure style will have been role modelled for those who are less secure.

The implications are that teams cannot have a one size fits all approach to both the understanding of team dynamics and processes, and that interventions need to be tailored to the needs of the individual and the team. Leadership of teams includes providing a

supportive and psychologically safe environment, and acting in a consistent manner which will provide consistent messages to the team and thereby the team is developed as a source of security. Team leaders and those facilitating teams may use the knowledge of attachment dynamics to better understand that team members will differ in their responses to others in the team, and organisation, and attachment helps give insight into how and why employees differ and have better tools to build relationships in teams. A secure base is enhanced and developed by the maintaining of strong and positive interpersonal relationships in the team, which may aid the development of felt security. In developing the secure base there may need to be differing goals and plans for each of the team members in this process, as each style may respond differently to these interventions. For teams to be successful and to develop relationships, communicate, exchange information and interact for performance within the team, the implications of attachment need to be understood.

5.11 Implications for Practice

The research findings can be elaborated and implications for practice and theory developed. There are a number of implications and issues that can be drawn out are the role of a secure base for team members and here positive organisational psychology may have a role. Attachment theory has already been applied to this area (e.g., Snyder & Lopez, 2002; Quick et al., 2010). Although there are dysfunctional aspects to insecure styles as noted in the results of this research, the application of attachment styles may not focus on the dysfunctional orientations, rather it can be positive with the focus on secure attachment and the notion of a secure base to explore (Lopez, 2003). This current research has found that anxious and avoidant attachment styles have negative influences on teams via Team Identification and lower levels of TMX. It supports the importance of a secure attachment style and by implication the notion of a secure base which will allow for exploration (e.g.,

Hazen & Shaver, 1990). This is in line with the positive psychology notion of a secure attachment (i.e., low anxiety and low avoidant) as a key aspect of positive psychology and a key construct in developing positive organisations (Lopez, 2003). Overall, attachment theory has served as a flexible and generative framework for researching how attachments affect psychosocial growth and development throughout our lives and in a variety of different contexts. The attachment literature available has traditionally accentuated the adverse impacts of attachment insecurity on human functioning. However, attachment studies are increasingly adopting a positive psychological perspective that explores the contributions of secure adult relationships to the promotion and maintenance of healthy and adaptive behaviour within and across multiple life domains and which includes team contexts. The implications that this current research draws out, is that, as there are different attachment figures, there is a need to provide a secure base for teams and as Mikulincer and Shaver (2007c; 2016) suggest, it is the felt sense of security that may drive an array of positive psychology outcomes - such as prosocial behaviour, positive affect and increased wellness. This creation of a secure base is not about creating dependent teams and team members, however, the secure base seeks to create independence. This is achieved through a 'felt security', which in attachment theory, is the availability of caring, supportive relationship figures or partners and the ensuing sense of attachment security are fundamental for the formation and maintenance of mutually satisfying relationships during life, and also from being in a team that provides such support. The attachment literature clearly shows the relevance of attachment theory to both understanding and nurturing 'fully functioning relationships' (Kets de Vries, 2011), to which this research adds the notion of a secure base for the team context. The use of attachment can be developed by developing secure attachment as a goal and with perspective focus on useful and positive outcomes, rather than seeing insecure attachment as a dysfunctional style or as an illness. Secure base is achieved

with the organisation and leaders supporting fairness, consistency and reliability, and teams providing a sense of identity, belonging and attachment to the workplace and includes the need to ensure a sense of felt security and the dealing with the negative impact of insecurity. Leaders and managers can use attachment insights to create a positive environment that can allow for the creation of a secure base, which may differ between organisations and teams depending on their context. Organisations can support the development of a secure base by creating a container for insecurity and ensuring there is clarity about the primary task, mission, strategy and expectations, internal and external accountabilities, supporting new staff with effective onboarding and supporting the development of all staff. A positive and supportive climate can allow for deeper relationships which then allows for challenging and difficult issues to be addressed. In summary, the individual a secure base is achieved with a relationship with sensitive and responsive attachment figures and whom act as a safe haven, and a team is seen to offer this. This is essential as with a secure base the individual can explore, so a team is a potentially a safe haven and a provider of support and protection, and personal growth (e.g Kets de Vries, 2011; Mayseless & Popper, 2007; Rom & Mikulincer, 2003). The role of the leader, coach or facilitator may be to provide the team with a secure base from which the past may be explored. They may need to explore ways that the team member/s may engage with others. They also may need to be aware of that their own attachment patterns may play a role on the team and that a team has an emotional dimension. Teams may be a forum where sensitive personal and organisational issues may be confronted, if there is the support from the leaders and the organisation itself.

Overall this focus on developing a positive focus may be helpful in moving attachment away from what is seen as a negative construct to a more positive and developmental perspective. Rather than insecure attachment styles seen as being a dysfunctional pattern of behaviour, there is a potentially a role for each insecure attachment

style, for example some work or roles may be best suited by those distant and detached, where the team does not require integration or interaction, and with anxiously attached being hyper vigilant may be first to be aware threats for the team. In support of this the terms insecure, anxious and avoidant attachment may in organisations be replaced by terms such as reliant, self-reliant, over dependence and counter dependence. It is also suggested that the focus of positive psychology has tended to be on individual experience, engagement, and personal feelings of well-being, rather than a focus on relationships as such. For some views of positive psychology, the suggestion is that relationships contribute to these goals (Beach & Fincham, 2010) and attachment may be a useful framework for this. Positive psychology has paid relatively little attention to how strengths, well-being, and human flourishing may be embedded in relational contexts (Maniaci & Reis, 2010) and attachment theory can add to the understanding of relationships as a potential strength in teams and organisations with the focus on developing secure attachments. This is useful in areas such as team building where an attachment approach is not about the assigning of traits or roles to individuals, such as team roles, rather the development of a secure base and alongside this attachment gives a deeper insight into the team dynamics in an interactional process. The concept of insecure attachment — anxious and avoidant — had the implication of being fixed with interventions unavailable or effective. This view is now not widely held and various ideas about changing attachment styles, such as via interventions to change the mental model have been suggested (Gillath, et al., 2016). A multi-prong effort is required and interventions such as cognitive and emotional restructuring, psychodynamic understanding, techniques from family and group psychotherapy, paradoxical intervention, role playing and motivational interviewing (Kets de Vries, 2011). The use of priming strategies, which is an activation of a particular positive mental representation or association from the team member's memory, which is artificially activated via priming (Mikulincer & Shaver, 2016). This makes peoples sense of

security more accessible, which will potentially affect their cognitions and behaviours, and as the prime is about a sense of attachment security, develop a more positive working model.

Support for changes can also be provided by teams and leaders providing a consistent message of being a safe haven. Avoidant team members would need consistent messages and this would be a longer term approach, as they do not readily volunteer to do something about attachment pattern as it is not seen as a problem. Team members consistently offering support may provide a similar platform for the development of a secure base and so the team relationships themselves can be a source of strength. However, there are some potential limitations; for instance in some cultures it is considered shameful to talk about what may be private matters with outsiders, and difficulties that do exist need to be contained within the family. We need to consider the interaction of the attachment styles and from this develop the understanding that the team behaviours of some members are not merely dysfunctional or irrational, rather they are a logical reflection of attachment style. Attachment styles give a framework to understand what drives these behaviours and the narratives that team members are using. Indeed, the dynamics between the different attachment styles can be more useful than explaining different traits or styles when trying to evaluate team behaviour. For example, where a team member has higher levels of adult attachment anxiety they may engage in all of the functional care seeking behaviours, however, they may not be able to recognise or make use of the support that is provided in response by others in the team. There is potentially a variety of team interactions depending on the matching of the different attachment styles in the team. An example is the matching of an anxious team member with others who are secure. Problems can arise here due to differing expectations as the securely attached team member expects others to take responsibility for self-management. They look for a higher level of independence than their anxiously attached teammates and are less reliant on others. When the anxiously attached individual insists on more reliance, the secure

attachment style worker can be tempted to withdraw from the relationship. Key characteristics of this matching of an anxious team member with a secure team member is that the anxiously attached may tend to repeatedly ask for or expect help when they do not really need it. They expect team assistance when being independent or autonomy would be more appropriate and when this is not given, they may tend to express their perceived distress more than is necessary. They may expect to be treated as special and will easily become jealous of other team members and will constantly question the support of other team members, and can even become manipulative in their attempts to reassure themselves of this support. Most notably they will feel unconfident of their ability to succeed without the support of the team (Clutterbuck & Lane, 2004; Germain, 2011; Pistole & Watkins, 1995; Rothbard & Shaver, 1994). At the same time, anxious team members may not always be clear when communicating their needs and they may also dip in and out of the team with varying levels of involvement. Where there is a team avoidant team member, the dynamics are very different. Some relationships may form but they will be less close than the accepted norm. On a positive note, avoidant team members may be seen as less demanding than those with different attachment styles. However, avoidant team members may not always enjoy good relations with other team members and they may also prefer to work alone. Non-cooperation with the team can also be a characteristic (Clutterbuck & Lane, 2004; Germain, 2011; Rothbard & Shaver, 1994). It has previously been seen that an avoidant adult attachment style is associated with a pattern of interpersonal difficulty (Lopez & Brennan, 2000). The implication is that in teams that require little social interaction, this match may be functional, but in teams that require the development of skills related to emotional disclosure and intimacy, the team composition or match may be dysfunctional.

5.12 Limitations

As expected, there are some limitations in the research. Firstly, it was cross sectional research and, although much of the work in the attachment literature is also cross sectional (Mikuliner & Shaver, 2016), this current research suggests that future work may need to examine the dynamic interaction of the influence of attachment and the team. In the team context, measures could be taken from the different team members to examine the interaction of the different attachment style on team functioning and the individuals themselves. The use of a snowball sample has been argued to increase responses and a pragmatic solution to increase sample size, however, it does have some limitations (Heckathorn, 2002), such as sample bias and in this study the sample had a large proportion of female respondents and those with a post-graduate degree. Two outcome variables were measured with single item measures, which have been seen as useful to capture perceptions and represent global constructs (e.g. Wanous, Reichers, & Hudy, 1997), which is relevant in the context of this study, and they are by design demand a lower cognitive load. Notwithstanding, this single item measures are often critiqued on psychometric grounds with longer scales being preferred to provide greater reliability.

The responses from those with a higher anxious attachment could be a limiting issue anxious attachment individuals have a desire and need for closeness that affects both their perception of the team and their ability to answer questions on team-related topics. It is possible that it is to such an extent that their responses are distorted by both their own biased perspective and social desirability bias to such an extent that they are not accurate? If this is correct that this could be an underlying reason for the finding that attachment anxiety is overall not a good predictor of the study variables. Therefore, it could be argued that a key limitation of self-report methodology is that it does not work with anxiously attached people when investigating a topic that is key to their fundamental fears of exclusion. Anxious

attachment have difficulty with direct communications and alternative methods may be needed such as network analysis or more qualitative methods such as diaries. A diary study may be useful in that the key sources of security and insecurity may be uncovered. Different outcomes may also be associated with each insecure attachment and outcomes specific to each style may be used in future studies.

It is suggested that the measurement of attachment needs to be reviewed and possibly stronger context specific instruments developed. The two differing approaches to attachment discussed in this research may need to be incorporated to give a deeper and perhaps more holistic view as each contributes a slightly different attachment insight. There is widespread and successful use of global instruments, especially the ECR. However, this would now benefit from a deeper and fuller research for a measurement tool that can be used effectively in organisational settings. The length of the ECR can also be problematic for organisational settings as it requires a certain time commitment. Shorter versions of potential work oriented scales need further development as a more targeted approach could be of value. There is room for some development in this area (e.g., Neustadt et al., 2011) and future work on this is required. The use of longer scales for psychometric reasons may then need to be relooked at. Whilst the ECR is well regarded and seen as the key scale for measuring adult attachment, and is widely used in organisational settings there remains some important concerns with it that should not be discounted, for example Fraley et al., (2000) have noted that the ECR items assess insecurity better than security which suggests a bias which may prove to be unhelpful.

5.13 Future Research

There are a number of areas for research that flow from this current research. As discussed above, whilst the research methods in attachment have been debated, the

methodological issues in applying attachment theory to the workplace have not yet been rigorously debated. In particular, the use of clinical scales being simply transferred to organisational settings needs further review and the strong quantitative approach. There has been some useful work in this area with the development of work specific scales such as the supervisor attachment scale (Game, 2008), and the development by Joplin et al. (1999) of the Self Reliance Inventory (SRI), and Neustadt et al. (2011) of the organisational adult attachment scale. However, there is currently no general or widespread use of these tools and they differ in the content of what is actually measured. There has also been little critical review of the methods used and the pertinent issues around what we measure and how we measure when collecting data for researching adult attachment in the workplace and so review and reflection on how to proceed in this area would bring a greater coherence to future research. On the practical issue of the time commitment needed given the length of the scale, it is noted that Wei, Russell, Mallinckrodt, & Vogel (2007) have developed a 12-item version of the ECR. However, it is still an ECR-derivative with a clinical perspective and it inherently has limitations for the organisational context. From this, it is suggested that more work is needed to develop a short, well regarded and accepted workplace-oriented scale which could be adopted by those working in the area. A compounding issue is that different conceptualisations of attachment are used. There is the two dimensional perspective note above and that of the more categorical model. The ECR based measures are widely used as the basis or workplace reviews of attachment (e.g. Paetzold, 2015) and this may be the basis of a widely used workplace measure in the future.

Traditionally, workplace applications of attachment have tended not use the qualitative interview approach. The lack of practice here translates into it being an interesting and potentially fruitful area for future work. Qualitative work can use the idea of narratives, for example, not only in teams but in additional areas such as coaching. The narratives and

stories could become the data to analyse the attachment patterns in both the individual and team. Here the applications could be useful in contexts such as coaching where attachment themes have already been applied (Drake, 2009). Here methods such as diaries may be useful as they will capture the interactions of the team members and allow for a longitudinal methodology. Attachment seems to be very suitable for using multiple methods of research, which is increasingly being used in Psychology (Robson & McCartan, 2016). However, it may be more useful to supplement traditional survey based measurement with alternative assessment tools. The quantitative measurement can focus on the assessment of psychological constructs and other methods to observe the actual observable behaviour or artefacts of behaviour. Given the dynamics of attachment and in the team context, a deeper understanding of team process dynamics and attachment can be explored, with a longitudinal designs as an important part of this, and although more resource intensive may provide many more useful and valuable insights. In this longitudinal approach methods such a diaries or video diaries may be used to capture the dynamics of the interpersonal issues in teams as these are more private and personal and hence less threatening on a personal level.

In the workplace applications, the current research suggests a number of issues which would be of value for future research of attachment in the context of teams in organisations. Team development is a key issue for organisations and numerous applications and models have been developed. As this research has found that attachment can greatly influence team functioning, then it would be useful to consider attachment when working towards team development. We have found that insecure and specifically avoidant attachment tends to encourage negative attitudes towards teams. Issues such as the role and interaction of factors such as organisational culture, the mix of attachment styles in a team, and how the team may support the psychological and interpersonal processes by which teams could support the change of the insecure oriented working models. Further interesting issues include an

exploration of the effects of different proportions of attachment styles in a team, what is the make of the team in terms of attachment. What are the consequences of different mixes of attachment?

To further develop this research and interventions around the issue of team development and the understanding of team dynamics, future research could examine the idea of matching attachment styles within teams and reflecting on the influence of the differing attachment combinations. Some work has already been done in the area of mentoring, where various matching categories have been developed (e.g., Germain, 2011) and this work could be developed in the context of teams. In this work, it is the interaction of the different attachment styles that are explored, not only the attachment style per se, rather the consequences of the different styles interacting with each other. Understanding how a team member's predominant attachment style is associated with work-related self-perceptions may offer insights into their behaviours and needs. This can help in the development of appropriate interventions and tools for successfully developing a team within an organisation, and for the leadership of teams. The use of attachment theory has potential benefits in staff satisfaction, retention, health and wellbeing, and, as a consequence, there is much support for more interaction studies such as suggested above (e.g., Richard & Schats, 2011). Research has found that individuals who are high on avoidant attachment report significantly higher Job Satisfaction when their supervisor support is low. In the case of a leadership application, changes in mental health was shown to be a function of both the individual and the leader avoidant attachment levels (Davidovitz et al., 2007). The influence of the family and other significant others may be important to explore the attachment influences or as control variables. For example, what is the role of leaders and organisational culture? An illustration may be a culture that is seen as high masculine such as the police or military: perhaps in these contexts an avoidant style would not be seen as dysfunctional. Although national culture

may not play a role, the organisational culture may be more or less supportive and create a secure base, or not. Teams within the culture may also play a differing role, such as offering a secure base in a hostile organisational culture. Considering the role and influence of the family, for instance, can the family act as a secure base and could this influence the workplace, what are the consequences of work attachments for the family and what impact does the work orientation attachment style such as avoidance have on the family, and vice versa? These issues may be central to a future research question or as control variables.

It can be argued that there is a need in organisations for positive interaction between team members and also a focus on coaching the salient attachment figures in teams at work. However, we are not restricted to only having the team as a source of security, it could be that a manager or a team leader take on that role. So, in investigating the role of attachment, future studies may need to take into account the effects of interaction between leaders and followers, but also who is the reported target-specific attachment figure. These specific attachment styles and generalised attachment styles may not match one another, but both may explain variance in terms of perceptual and behavioural outcomes. Here a social network methodology may be useful as it will allow for the analysis of multiple attachment figures and see the attachment in terms of distance with each of these figures. This looks at the network of relationships and the interconnected nature or not of the individual to others.

Within Organisational Psychology there is the widely used notion of Person-Organization-Fit which the research is derived from Schneider's (1987) Attraction-Selection-Attrition framework (ASA). The ASA framework suggests that employees actively search for work situations that are attractive to them, instead of being passively assigned to certain jobs (Schneider, Goldstein, & Smith, 1995). From this, we could surmise that attachment orientations could predispose individuals to workplaces with certain types of teams. That is, that attachment orientations may actually encourage people to self-select to either join

organisations which require team work or ones which place greater emphasis on individual methods of working. For Schneider (1987), environments are a function of the people behaving in them, and this has a role for attachment in that the meanings that the different attachment styles bring will impact on the organisation. It is seen in this current research that avoidant attachment has a negative influence on team functioning with both TMX which is the quality of relationships between individuals and their team members, and Team Identification. Attachment theory could be used to develop a more multi-level of teams, and indeed other organisational areas. For research into teams there is an interaction or juncture between the individual attachment, the team attachment and the organisation attachment, and there are also the actual team processes to include. Issues such as how does the team emergence and what are the dynamics in the team, and how does the individual cognition, affect, and behaviour influence these issues from an attachment view.

A key application for team attachment is that it could also be explored in relation to team conflict which is a heavily debated issue and a contentious issue. (e.g., De Dreu, 2008; 2003; Tjosvold, 2008). In this current research positive TMX may be seen as an indicator of lower team conflict, however, further studies could explicitly explore this issue further. Although sometimes conflict is seen as a positive (Tjosvold, 2008) conflict in teams is possibly never a completely positive experience for either the people involved or the organisation that they work for. Drawing on attachment theory (e.g., Kobak & Duemmler, 1994; Simpson et al., 1996) it is suggested here that a useful thread of future research and for practice is to examine an individual's response to team conflict which may differ depending on the prevailing model of attachment of those in the team. Although this research did not find a strong role for the anxious attachment style, those with a team anxious style may experience the conflict as a threat to the team relationship, or conflict may trigger concerns about being abandoned by the team or about the team's responsiveness to their needs, which

will then lead to hyper activation of the attachment system. The response to conflict will be by displaying intense emotions and excessively focusing on their own concerns, and they may have difficulty in responding to the information being communicated by the team. On the other hand, for a person with team avoidant style, conflict may pose a threat because it impinges on their preference for independence and self-reliance, a preference that may reflect a belief that others will be emotionally unavailable and unresponsive. During conflict, dismissing-avoidant individuals might be pressured to engage in behaviours that are connected to establishing emotional closeness such as revealing personal thoughts and feelings, a process that may threaten their need to maintain their independence. Thus, people with a dismissing-avoidant attachment style may respond to conflict by deactivating the attachment system, leading them to withdraw or downplay the significance of conflict (e.g., Kobak & Duemmler, 1994).

There are numerous potential applications of attachment theory to positively affect the workplace; in developing creativity the issue of a secure base could be explored, recognition of attachment styles could enrich coaching, techniques in change management could be more successfully handled. These interventions could be explored for both individual and team development. Linked to this, an interesting research area could be the differing responses to these interventions, and to key organisational support constructs such as positive organisational support. How do the different attachment styles respond? In this development of teams and individual a theme that could also be explored is whether contact changes attachment styles. Does an ongoing positive contact create a felt security and change the insecurity that may have been experienced? Team development may use the notion of priming from social psychology and see if this has an impact on attachment patterns and behaviours. Given the knowledge of the attachment this involves giving a positive message

to encourage a positive tone that can enhance felt security. This could be integrated into the process of team building as a feature of a team intervention.

Lastly, given the increasingly global nature of organisations, future research may be usefully conducted in multi-cultural contexts. For example, Richards and Schats (2011) additionally highlight that although the attachment research presented has been conducted internationally, it is mostly American, Israeli, and Australian samples that have been used. A broadening of the sample would prove especially helpful in teams where the individual members have different cultural norms. Although we note that there limited evidence for cultural differences in attachment styles, different cultures may have differing workplaces which offer more or less security. This may merit an investigation. Within the organisational culture theme, research using network methodology may be useful as this could include various teams that a person may be a member of, significant others and leaders, that the individual may interact with and the role of the culture.

Overall this current research has made a contribution to both the team and attachment literature and practice. The research has added to the emerging work that focus on the role that attachment styles may play in workplace situations and relationships (e.g., Littman-Ovadia et al., 2013). The attachment research agenda tends to have an assumption that working is intrinsically a relational act, which is performed within interpersonal contexts and relationships (Blustein, 2011; Bowen, Siehl, & Schneider, 1989). Therefore, all related decisions, experiences, or interactions within the work setting can be understood, influenced and shaped by such relationships. This current research thus meets the gap in the attachment literature and workplace field that has highlighted and suggested that researchers examine. This is the need to determine whether and how individual differences in relational functioning are predictive of work-related attitudes and behaviours (Blustein, 2011; Bowen et al., 1989; Harms, 2011; Hazan & Shaver, 1990; Kark, 2011; Lanciano & Zammuner, 2014;

Malach-Pines, 2005; Mikulincer & Shaver, 2007a; Popper, 2004; Richards & Schat, 2011). This current research has answered the research question by showing that adult attachment has some utility in organisations and specifically in understanding an individual's behaviour in teams and meets the call for greater attention to mediators of the linkages between attachment and outcomes (Paetzold, 2015). The role of organisational attitudes, perceptions and behaviours are complex and interconnected. Research using more complex models which require models such as mediation are seen as important in understanding the pathways of attachment in organisations, and meets a similar need in team oriented research (Paetzold, 2015; Mikulincer & Shaver, 2016).

6. Conclusion

The current research has shown the influence and importance of attachment styles and specifically that of team attachment styles in the workplace. The findings support the notion of a focus on team attachment and not only global attachment and that the attachment in workplace teams provides useful insights. There was a strong influence of the team avoidant style and more limited role of the anxious style and various reasons for this have been given. It could be that as anxious attachment have difficulty in trust and talking directly about what are the issues that may be causing them discomfort, may not respond to the interpersonal nature of the questionnaire items. These finding from the research are useful as it may encourage teams and those that manage or develop them to be aware of the more unseen influences on teams. Understanding of teams may be deeper by using attachment styles and challenge the traditional models which focus on static models of teams. The more rational, and purely cognitively or structurally focused team interventions may not deal with the individual unconscious dynamics, as this is often hard to access. Attachment theory provides a useful methodology which may help crosses this divide. Organisations and teams are not solely rational, rule-governed systems they depend on and are influenced by the deeper and unconscious aspects of individuals, such as their attachment styles. The current research suggests that an understanding of attachment dynamics in teams can facilitate team development and team building by bringing a much deeper and therefore better understanding of team functioning. The research has not only contributed to the research literature around application of attachment theory and teams, there are useful lessons for the individual, for the role of a consultant, and team leader which is highlighted by this attachment approach.

With the relationship between global and team attachment confirmed there can be an understanding of the both the global and the team attachment, and the need for specific team

attachment measures in team building or understanding the role of both global and team attachments. Here the use of the team attachment instrument as a tool for potential use in team development is suggested, and the relationship with attachment and teams provides a useful insight into the deeper dynamics of teams and indeed organisations. A key issue that is implied by this is the need to develop positive workplaces that challenge and support individuals to bring about secure attachment, or to create a secure base.

Leaders and other significant others may provide the team members with a secure base, where the team members feel that they are safe enough to explore, which needs to include those with the insecure patterns. The facilitators of teams may not only benefit from the insights from attachment, also insight about the role they need to play and the prerequisite to be emotionally available to the team, and to understand the differences of each individual. Attachment also brings another developmental perspective to the team process, and organisational life in general, as it explains the interaction of the individual's inner world of the individual and their perceptions and the external behaviours. This gives greater insight in teams than for instance, what the various team roles may be in terms of the tasks undertaken and role they may prefer. The role of the team leader or consultant in being emotionally available and creating a secure base is not about the creation of dependence, rather independence. This can then be used to develop effective teams and manage team development issues such as team engagement, team relationships and avoid conflict.

It is not suggested that there is a role for attachment in any selection process for teams or to label the team members. It is important to recognise that attachment dynamics and styles are a process, and it is the insights and the greater interpretation that is available to the team and its facilitators that is the strength of this approach. There are implications for interventions such as team building, coaching, leading teams and related team interventions. Interventions may need to take longer and be tailored to the individual, and for example may

include more psychodynamic exploration, cognitive and emotional restructuring, role playing, coaching, and motivational interviewing (Drake, 2009; Kets de Vries, 2011). The use of attachment in further understanding the roles that individuals play in key organisational processes and outcomes may bring useful and deeper insights. The attachment paradigm offers a complementary view to the commonly used individual difference measures such as personality in furthering our insight into our organisations.

An important issue is that there is a potentially negative labelling with the use of terms such as insecure attachment labels and the idea from this that attachment is a dysfunctional perspective and non-judgmental labels developed. Each attachment style has potential benefits and should not be perceived as negative or wholly dysfunctional (Ein-Dor, 2015). For example, insecure styles have more accurate prediction and detection of deceitful statements (Ein-Dor & Perry, 2014), a heightened tendency to deliver a warning message without delay (Ein-Dor & Tal, 2012), working in project teams by avoiding potential problems (Lavy et al., 2015). The understanding of this attachment process is useful for team development but should not be used to merely categorise and to use less judgemental labels. Attachment measurement is for understanding and not to provide a type or a label and in organisational and team management use it may be more useful to use alternative labels such as reliant, overdependence, counter dependence and similar non-judgmental labels. This may help the understanding of the dynamics of attachment in organisations without the negative labels and enable the greater use of the attachment perspective.

Specifically, this current research has developed the evidence for the linkage between attachment styles and team processes, and ultimately on perceptions of performance. Attachment styles have been shown to have an important role in teams as in many modern teams there is a higher level of interdependence now needed. Attachment brings a deeper and useful understanding of the individual in the team. There is therefore a need to move to

deepen our understanding of these processes and attachment theory holds promise for this. For example, to study teams we noted we need a more dynamic understanding and data for this. Multi-method studies with both cross sectional and longitudinal data are needed and attachment may provide an integrating framework as it will allow the understanding of the cognitive, affective, motivational and behavioural areas. Attachment theory can potentially play an innovative role in organisational and team research. In the research of teams and organisational issues, attachment may also provide a useful construct valid coding or rating scheme. This may be used for the understanding of narratives used in teams and individuals, from methods such as diaries and observation. It also will enable the suggested use of network analysis, which may play a useful role in understanding the different attachments, and move away from the focus on dyadic relationships. Attachment has been shown to have a role in understanding team dynamics and offer a useful theory for further team research that has a focus on the relationships in the teams.

In these relationships and the organisational networks, attachment styles may influence an individual's affect and cognitions toward their team and others, and how they view social support from their team and others. The current research has found that there tends to be a negative appraisal of others and a lack of closeness to the team and that those are more insecurely attached may not see the benefits of the support from the team preferring self-reliance and seeing this as resulting in superior performance. Issues around the change in this are necessary to explore. There are many potential challenges in this change of the working model or attachment style. For example for the avoidance orientation the suggestion of a secure base as a mechanism for dealing with insecure attachment, may seem as a contradiction as they tend to resist being close or part of a team, as this current research indicates. Avoidance oriented team members may show shallow affect and tend to be distant from team building activities which required self-disclosure and intimacy in many cases.

They tend to minimise any source of discomfort and project those weaknesses highlighted by an intervention, onto others. The reliance on cognitive factors by the avoidance person means that they may ignore or deny emotional reactions such as fear or anxiety. A strong challenge or confronting the avoidant team members may only result in more defensive behaviours and further distance from the group. It is suggested that a longer term security enhancing environment may be more suitable as an intervention and given the self-reliance orientation of an avoidant person, a more useful approach may be to give tools to help themselves as an initial intervention. This may see less resistance from the avoidant team member and they possibly will then not devalue or dismiss the intervention. This means that for interventions, change in attachment is possible but there are issues to consider, such as that change may be constricted by other or previous attachments, and that attachment or the internal working model is not that readily accessible, as it is largely unconscious. Furthermore, team leaders and facilitators have their own working models which may influence the approach they take in the team or team building process. This potential interaction highlights the need for self-reflection on the part of the potential developer of the secure base.

As argued above the different attachment styles do give some insights into individual's reactions and responses to stress and challenges, and help guide them through relevant and useful coping strategies (Kobak & Sceery, 1988; Mikulincer, 1995). A person's attachment style affects both the individual's way of building, maintaining and evaluating close relationships, as well as the person's methods for coping with difficult situations and emotions. These may need to be shaped and changed as sometimes those early strategies for coping as a child do not work in the environment we face as adults and specifically the workplace. There is thus often then a need to change these attachment patterns in the workplace. The understanding of attachment patterns can assist an individual in this process.

This change can be fulfilled by creating a secure base, which is enhancing a sense of felt security and by being responsive to some individual's need for security and protection. This is not the same as creating a dependency relationship, rather a secure base acts as a scaffold and provides a safe haven from which to explore and become independent and more autonomous. We can help build a secure base by developing healthy workplaces with positive relationships in teams and with significant others.

Overall, it may be difficult to changing the individuals working model as individuals may not tend to reflect and appraise how useful their working model is in various contexts. Working models tend to operate on an unconscious automatic level and so may be difficult for individuals to reflect and appraise the content of the thoughts and attitudes. Making a judgement about a working model is even more difficult and it could be questioned whether we can create a more secure attachment style, or if the best we can do is help the more seriously insecurely attached people become less secure. For example, it was discussed above, that in team interventions it is useful to be mindful of challenging avoidant individuals, as in doing this we are confronting their vulnerabilities which can activate defensive reactions and enhance the avoidance strategies. For avoidant individuals it may be useful to see these interventions as longer term and initially avoid a focus on the more dysfunctional labelling of the approach or that may require deep reflection. We develop the relationship and the rapport, and we then create a security enhancing environment. The team itself, or team leadership or other key significant figures may be able to act and be viewed as a security enhancing figure. If this is successful and the avoidance tendency is lowered some confrontation to give the individual some insight may be then be successful. Another approach is that possibly giving avoidant individuals tools to help themselves may achieve some commitment to the team development, and indeed organisational development, interventions we use in practice. One such approach is the coaching model used by Drake

(2009), where the narratives about work and being in a used by individuals, is interpreted and made sense of by reference to the attachment styles that may underlie the narratives being used. This gives insight into not only the rational and verbal levels seen in the coaching, but also the deeper and non-rational forces, and provides useful a framework for understanding the team processes. As in coaching the use of attachment styles may help make sense of the reactive strategies used in team, coaching and other relationships and which may be a result of insecure attachment. Attachment may act to reinforce an individual's existing expectations, actions and rewards and/or act as a defence in interactions with others. Finally, as we now have evidence for the role of attachment styles in organisations, we may now need some research on the nature and effectiveness of interventions from the attachment perspective in organisations.

It has been argued in this research, and the results have shown, that teams can be a source of security and act as an attachment figure. Other figures can take this role, including leaders, coaches, and significant figures in the organisation, in addition to others outside the organisation. The interaction between these, it has been argued, is an important process that can influence team behaviours and so an understanding of these is a useful practical tool. It is not just a understanding the attachment style, rather understanding of why that pattern exists in relation to that figure or context such as the team, and the interaction between the attachment styles in the team that may be a more useful application of attachment styles. Overall the development of a secure attachment can be seen as the foundation for relationship competence and social competence (Hazan & Shaver, 1990). Understanding the influences and linkages between attachment styles and outcomes, may give greater understanding of the complex and interconnected variables that make up team interactions in organisations.

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Appendices

Appendix 1 - Construction of questionnaire - Survey 1



Thank you for taking part in this study on experiences and feelings in team work.

For the team questions please respond in relation to a specific team in which you work.

There are no right or wrong answers. I only ask for your honest and spontaneous response to each statement in the questionnaire. **You may find that some items are very similar**. Please respond to each item with your first and spontaneous reply, do not spend too much time on any one item. Please answer all the questions if possible. The survey will take around 12 – 15 minutes.

Participation in this study is completely **voluntary** and **anonymous**. The study is part of my PhD study.

If you have any queries or a copy of the results please email Gary Pheiffer at g.pheiffer@londonmet.ac.uk. You will be given the opportunity to enter a prize draw at the end of the survey.

Thank you for taking the time to participate in my research.

Gary Pheiffer
Principal Lecturer
School of Psychology
London Metropolitan University

*** Please rate your overall feelings about working in your team**

	Strongly Disagree	1	2	3	4	5	6	Strongly Agree
1. When other members of my team are busy I often volunteer to help them out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I frequently recognize the efforts of other members of my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I frequently take actions that make things easier for other members of my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. When I am busy, other members of my team often volunteer to help me out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Other members of my team frequently take actions that make things easier for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Other members of my team frequently recognize my efforts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I communicate openly with other members of my team about what I expect from them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I frequently suggest ideas that other members of my team can use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Other members of my team frequently provide support and encouragement to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Other members of my team communicate openly with me about what they expect from me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Other members of my team frequently suggest ideas that I can use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I frequently provide support and encouragement to other members of my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In answering the following questions please keep thinking about the same team as above.

*** Frequency of interactions: How often do you interact with this team?**

- Continually (all my work is done with the team)
- Several times a day
- Once a day
- Several times a week
- Once a week
- Several times a month
- Once a month
- Less than once a month

*** Team Interactions: Mostly the team interactions are**

- Virtual written (for example using internet based media including discussion boards, emails)
- Virtual auditory (for example conference calls, telephone)
- Virtual visual (for example skype, video conferencing)
- Physically face to face (eg in the same room)

How long is an average team interaction

Minute/s

Hour/s

In total, how much time do you spend with your team per month?

Minute/s

Hour/s

*** Size of team (number of members including yourself):**

- 2-3
- 4-5
- 6-7
- 8-9
- 10+

*** Quality of the contact with your team**

Please rate the quality of your contact with your team

	1	2	3	4	5
	very bad				very good
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please provide the following background data that are essential for this research

Gender

- Male
- Female

***Age (please state)**

Education

- School
- Post school college
- Bachelor degree or equivalent
- Masters or above

You have been in your present organization for:

- a. Less than 6 months
- b. Less than 1 year
- c. More than 1 but less than 2 years
- d. More than 2 but less than 5 years
- e. More than 5 years less that 10 years
- f. More than 10 years less than 15 years
- g. More than 15 years

*** Please answer the following questions by selecting the appropriate option on the scale.**

	1	2	3	4	5	6	7
	Extremely	Very	Dissatisfied	Neutral	Satisfied	Very	Extremely
	dissatisfied	dissatisfied				satisfied	satisfied
Overall, how satisfied are you with your job?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** Please answer the following questions by selecting the appropriate option on the scale.**

	1	2	3	4	5	6	7
	Very poorly						Extremely
							well
How well do you think you have performed in your job, recently?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How well do you think your team has performed recently?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***Over the past six months to what extent have you engaged in each of the following behaviours on your present job? Use the scale to rate the behaviours**

	1	2	3	4	5	6	7
	Never	Rarely	Occasionally	Sometimes	Fairly often	Very often	Always
1. Help others who have been absent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Willingly give your time to help others who have work-related problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Adjust your work schedule to accommodate other employees' requests for time off.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Go out of the way to make newer employees feel welcome in the work team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Show genuine concern and courtesy toward co-workers, even under the most trying business or personal situations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Give up time to help others who have work or non-work problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Assist others with their duties.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Share personal property with others to help their work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Attend functions that are not required but that help the organizational image.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Keep up with developments in the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Defend the organization when other employees criticize it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Show pride when representing the organization in public.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Offer ideas to improve the functioning of the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Express loyalty toward the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Take action to protect the organization from potential problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Demonstrate concern about the image of the organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** Please continue and respond to the following statements as on the previous page.**

	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
27. I usually discuss my problems and concerns with close others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. When I don't have close others around, I feel somewhat anxious and insecure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. I feel comfortable depending on others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. I get frustrated when others are not around as much as I would like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. I don't mind asking close others for comfort, advice, or help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. I get frustrated if others are not available when I need them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. It helps to turn to close others in times of need.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. When other people disapprove of me, I feel really bad about myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. I turn to close relationship partners for many things, including comfort and reassurance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. I resent it when others spend time away from me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** Please continue and respond to the following statements as on the previous page.**

	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
14. I worry about being alone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I feel comfortable sharing my private thoughts and feelings with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. My desire to be very close sometimes scares people away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I try to avoid getting too close to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I need a lot of reassurance that others really care about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I find it relatively easy to get close to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Sometimes I feel that I try to force others to show more feeling, more commitment to our relationship than they otherwise would.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I find it difficult to allow myself to depend on others that are close to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I do not often worry about being abandoned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I prefer not to be too close to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. If I can't get others to show interest in me, I get upset or angry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I tell others just about everything.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. I find that others don't want to get as close as I would like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***The statements below concern how you feel generally in emotionally close relationships. I am interested in how you generally experience relationships, not just in what is happening in a current relationship.**

The following statements concern how you generally feel in close relationships (e.g., with romantic partners, close friends, work colleagues, close team members, or family members). Respond to each statement by indicating how much you agree or disagree with it.

	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
1. I prefer not to show others how I feel deep down.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I worry about being rejected or abandoned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am very comfortable being close to other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I worry a lot about my relationships with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Just when someone starts to get close to me I find myself pulling away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I worry that others won't care about me as much as I care about them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I get uncomfortable when someone wants to be very close to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I worry a fair amount about losing my close relationship partners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I don't feel comfortable opening up to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I often wish that others feelings for me were as strong as my feelings for them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I want to get close to others, but I keep pulling back.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I want to get very close to others, and this sometimes scares them away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I am nervous when another person gets too close to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** Please respond to the following statements on the basis of how you feel about this team and your membership in it.**

	do not agree at all 1	2	3	4	5	6	agree completely 7
1. I see myself as a member of the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I am pleased to be a member of the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I feel strong ties with the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I identify with other members of the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Being a member of the team is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I am afraid my present life is incompatible with my team identity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I cannot talk to my friends about what it is like working with my team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I am afraid my present life is incompatible with my professional identity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. My family background is compatible with my team identity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. My family background is compatible with my professional identity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** Please continue and respond to the following statements on the basis of how you feel about this particular team and your membership in it.**

	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
13. I am somewhat uncomfortable being close to my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. My team is never there when I need it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I find it difficult to completely trust my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I don't worry about being alone or not being accepted by my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I find my team is reluctant to get as close as I would like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I am not sure that I can always depend on my team to be there when I need it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Often my team wants me to be more open about my thoughts and feelings than I feel comfortable being.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I am comfortable having my team depend on me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I sometimes worry that my team doesn't value me as much as I value my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I am comfortable depending on my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I know that my team will be there when I need it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I want to be emotionally close with my team, but I find it difficult to trust my team completely or to depend on my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I do not often worry about being abandoned by my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** Please respond to the following statements on the basis of how you feel about this particular team and your membership in it. There are no right or wrong answers to any of these statements; we are only interested in your own personal reactions and opinions.**

	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
1. I find it difficult to allow myself to depend on my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I sometimes worry that I will be hurt if I allow myself to become too close to my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I want to feel completely at one with my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I find it relatively easy to get close to my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I do not often worry about my team getting too close to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. It is very important to me to feel independent and self-sufficient.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I am nervous when my team gets too close.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. My desire to feel completely at one sometimes scares my team away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I prefer not to depend on my team or to have my team depend on me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I often worry that my team does not really accept me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I am comfortable not being close to my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I often worry my team will not always want me as a member.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** Is your team temporary or permanent?**

Temporary

Permanent

If your team is temporary how long will the team be in existence?

If your team is permanent how long have you been in this team for?

Position in your present team:

Team leader/manager

Facilitator

Team member

Other

***Time spent with your team**

	1	2	3	4	5
How often do you have contact with your team	almost never				everyday

THANK YOU for completing this survey!

If you wish to enter the prize draw for an amazon.co.uk voucher please email garypheiffer@hotmail.co.uk

Appendix 2 - pre participation E-mail

Hello

I am in the last stages of my PhD and need some help in collecting data!

Could you please spend 12 - 15 minutes or so to complete my questionnaire (just click on this link below)

<https://www.surveymonkey.com/s/M9Q5QN5>

As with most questionnaires it does seem repetitive but please do try complete!

The study is about working in teams and you need to answer in relation to a team you work with, and the interactions you have with that team, and its members. There is a prize draw at the end of the questionnaire where you can win [amazon.co.uk](https://www.amazon.co.uk) gift vouchers.

The study has been approved by the ethics process at LondonMet and is completely confidential

AND MORE! If you are able it will be much appreciated if you can forward this email and the link below to any colleagues and/or friends for them to complete the survey. I need over 300 people to complete the questionnaire

<https://www.surveymonkey.com/s/M9Q5QN5>

I really appreciate your help

Regards

Gary Pheiffer

Appendix 3 - Factor Analysis Tables

ECR: Summary of Exploratory Factor Analysis Results for ECR

Rotated Component Matrix

	Component	
	Anxious	Avoidant
1. I prefer not to show others how I feel deep down.		.62
2. I worry about being rejected or abandoned.	.72	
3. I am very comfortable being close to other people.		.63
4. I worry a lot about my relationships with others.	.60	
5. Just when someone starts to get close to me I find myself pulling away.	.40	.60
6. I worry that others won't care about me as much as I care about them.	.80	
7. I get uncomfortable when someone wants to be very close to me.		.64
8. I worry a fair amount about losing my close relationship partners.	.70	
9. I don't feel comfortable opening up to others.		.66
10. I often wish that others feelings for me were as strong as my feelings for them.	.72	
11. I want to get close to others, but I keep pulling back.	.56	.54
12. I want to get very close to others, and this sometimes scares them away.	.65	
13. I am nervous when another person gets too close to me.	.44	.59
14. I worry about being alone.	.64	
15. I feel comfortable sharing my private thoughts and feelings with others.		.62
16. My desire to be very close sometimes scares people away.	.60	
17. I try to avoid getting too close to others.	.40	.62
18. I need a lot of reassurance that others really care about me.	.73	
19. I find it relatively easy to get close to others.		.51
20. Sometimes I feel that I try to force others to show more feeling, more commitment to our relationship than they otherwise would.	.64	
21. I find it difficult to allow myself to depend on others that are close to me.	.40	
22. I do not often worry about being abandoned.	.42	
23. I prefer not to be too close to others.		.61
24. If I can't get others to show interest in me, I get upset or angry.	.58	
25. I tell others just about everything.		.52
26. I find that others don't want to get as close as I would like.	.57	
27. I usually discuss my problems and concerns with close others.		.64
28. When I don't have close others around, I feel somewhat anxious and insecure.	.61	
29. I feel comfortable depending on others.		.54

30. I get frustrated when others are not around as much as I would like.	.62	
31. I don't mind asking close others for comfort, advice, or help.		.63
32. I get frustrated if others are not available when I need them.	.57	
33. It helps to turn to close others in times of need.		.63
34. When other people disapprove of me, I feel really bad about myself.	.56	
35. I turn to close relationship partners for many things, including comfort and reassurance.		.56
36. I resent it when others spend time away from me.	.56	

Percentage of total variance 27% 15%

Eigenvalues 9.86 5.36

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Team Attachment: Summary of Exploratory Factor Analysis Results for Team attachment
Using Principal Component Analysis, Rotation Method: Varimax with Kaiser Normalization

Rotated Component Matrix^a

		1 Anxious	2 Avoidant
1.	I find it difficult to allow myself to depend on my team.		.63
2.	I sometimes worry that I will be hurt if I allow myself to become too close to my team.	.59	
3.	I want to feel completely at one with my team.		-.45
4.	I find it relatively easy to get close to my team.		-.57
5.	I do not often worry about my team getting too close to me.	-.32	
6.	It is very important to me to feel independent and self-sufficient.		
7.	I am nervous when my team gets too close.	.69	
8.	My desire to feel completely at one sometimes scares my team away.	.59	
9.	I prefer not to depend on my team or to have my team depend on me.		.55
10.	I often worry that my team does not really accept me.	.63	
11.	I am comfortable not being close to my team.		.44
12.	I often worry my team will not always want me as a member.	.68	
13.	I am somewhat uncomfortable being close to my team.	.59	.43
14.	My team is never there when I need it.	.38	.62
15.	I find it difficult to completely trust my team.	.43	.60
16.	I don't worry about being alone or not being accepted by my team.	-.35	
17.	I find my team is reluctant to get as close as I would like.	.54	
18.	I am not sure that I can always depend on my team to be there when I need it.	.38	.67
19.	Often my team wants me to be more open about my thoughts and feelings than I feel comfortable being.	.50	
20.	I am comfortable having my team depend on me.		-.44
21.	I sometimes worry that my team doesn't value me as much as I value my team.	.65	
22.	I am comfortable depending on my team.		-.73
23.	I know that my team will be there when I need it.		-.74
24.	I want to be emotionally close with my team, but I find it difficult to trust my team completely or to depend on my team.	.51	
25.	I do not often worry about being abandoned by my team.	-.40	

Percentage of total variance 28% 9%

Eigenvalues 6.99 2.15

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

TMX: Summary of Exploratory Factor Analysis Results for TMX Using Principal Component Analysis, Rotation Method: Varimax with Kaiser Normalization

Rotated Component Matrix^a

	Component	
	1	2
1. When other members of my team are busy I often volunteer to help them out.		.71
2. I frequently recognize the efforts of other members of my team.		.74
3. I frequently take actions that make things easier for other members of my team.		.79
4. When I am busy, other members of my team often volunteer to help me out.	.78	
5. Other members of my team frequently take actions that make things easier for me	.80	
6. Other members of my team frequently recognize my efforts.	.78	
7. I communicate openly with other members of my team about what I expect from them.		.62
8. I frequently suggest ideas that other members of my team can use.		.72
9. Other members of my team frequently provide support and encouragement to me.	.82	
10. Other members of my team communicate openly with me about what they expect from me.	.74	
11. Other members of my team frequently suggest ideas that I can use.	.79	
12. I frequently provide support and encouragement to other members of my team.		.80

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

OCB: Summary of Exploratory Factor Analysis Results for OCB Using Principal Component Analysis, Rotation Method: Varimax with Kaiser Normalization

Rotated Component Matrix^a

	Component	
	1	2
1. Help others who have been absent.		.64
2. Willingly give your time to help others who have work-related problems.		.76
3. Adjust your work schedule to accommodate other employees' requests for time off.		.62
4. Go out of the way to make newer employees feel welcome in the work team.		.62
5. Show genuine concern and courtesy toward co-workers, even under the most trying business or personal situations.		.66
6. Give up time to help others who have work or non-work problems.		.77
7. Assist others with their duties.		.75
8. Share personal property with others to help their work.		.72
9. Attend functions that are not required but that help the organizational image.	.55	.37
10. Keep up with developments in the organization.	.73	
11. Defend the organization when other employees criticize it.	.75	
12. Show pride when representing the organization in public.	.81	
13. Offer ideas to improve the functioning of the organization.	.74	
14. Express loyalty toward the organization.	.83	
15. Take action to protect the organization from potential problems.	.80	
16. Demonstrate concern about the image of the organization.	.80	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Team Identification: Summary of Exploratory Factor Analysis Results for Team Identification Using Principal Component Analysis, Rotation Method: Varimax with Kaiser Normalization

Rotated Component Matrix^a

	Component		
	1	2	3
1. I see myself as a member of the team	.83		
2. I am pleased to be a member of the team	.87		
3. I feel strong ties with the team	.88		
4. I identify with other members of the team	.81		
5. Being a member of the team is important to me	.73		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

Appendix 4: Full Correlation Matrix

	M	SD	1. Ax	2. AV	3. T Ax	4. T Av	5. Tm ID	6. OCB	7. JS	8. IP	9. TP	10. TMX
1. Anxious Attachment	3.02	1.04										
2. Avoidant Attachment	3.32	.87	.22**									
3. Team Anxious	2.49	.94	.46**	.34**								
4. Team Avoidant	3.04	1.05	.24**	.37**	.49**							
5. Team Identification	5.59	1.14	-.05	-.22**	-.28**	-.59**						
6. OCB	4.87	1.02	-.05	-.13*	-.02	-.22**	.39**					
7. Job Satisfaction	4.74	1.42	-.10	-.13*	-.19**	-.23**	.44**	.27**				
8. Individual Performance	5.61	.94	-.10	-.17**	-.22**	-.14*	.28**	.35**	.25**			
9. Team Performance	5.36	1.13	-.15*	-.18**	-.29**	-.52**	.44**	.20**	.26**	.47**		
10. TMX	5.05	.91	-.08	-.14*	-.25**	-.45**	.45**	.31**	.32**	.32**	.51**	
Frequency of interaction	2.64	1.59	.01	.09	.04	.25**	-.20**	-.32**	-.09	-.10	-.16	-.17**
Length of team interactions	21.46	119	-.01	-.09	-.10	-.11	-.07	.13	.08	.10	.01	.04
Size of team	2.79	1.36	-.06	.01	-.01	-.05	.07	.09	.11	.03	.00	.05
Age	40	11	-.17**	-.02	-.02	-.04	.03	.09	.11	.06	.05	.04
Length of service	4.05	1.62	-.03	.05	.06	-.03	.04	.11	.06	.17	.04	.00
Position in team	2.19	.94	.14*	.00	-.05	.08	-.12*	-.26**	.06	-.09	.05	.03
Education	3.6	.73	-.08	-.10	-.01	.03	.02	.00	-.01	.03	.06	.00
Time spent with team	11	83	-.04	.03	-.02	-.11	.07	.09	-.10	-.05	.04	.04